

## Paolo Dini, Shenja van der Graaf and Antonella Passani Socio-economic framework for BOLD stakeholders

### Project report

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Document prepared by: LSE  
Paolo Dini, Shenja van der Graaf, Antonella Passani

Contributors: SUSS, Andres Guadamuz, Chris Marsden  
BYWASS, Clemens Wass  
UvA (IViR) Olivia Salamanca, Mireille van Eechoud

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## Document Authors

Paolo Dini, Shenja van der Graaf, Antonella Passani (LSE)

**Contributions by:** Clemens Wass (BYW), Andres Guadamuz and Chris Marsden (SUSS), Olivia Salamanca and Mireille van Eechoud (UvA - IViR)

## Project's Participant List

	Short Name	Organisation Name	Country
1	UVA	Universiteit van Amsterdam	NL
2	SUSS	University of Sussex	GB
3	LSE	London School of Economics and Political Science	GB
4	ALP	Alpenite srl	IT
5	SUAS	Fachhochschule Salzburg GmbH	AT
6	BYW	BY WASS GmbH	AT

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## Executive Summary

The report develops a wide-ranging analysis of the challenges and opportunities for the socio-economic sustainability of the provision of Open Data (OD), Public Sector Information (PSI) and, in particular, of Big Open Legal Data (BOLD). The analysis is carried out in the context of a multi-stakeholder community of private businesses, public administrations (PAs) hosting raw Legal Open Data (LOD) or BOLD databases of value-added services built on LOD, private or not-for-profit companies (and/or third sector non-profit charities) that may also host BOLD databases, and citizens. The private businesses can be further subdivided into software companies (especially but not exclusively small and medium-sized enterprises or SMEs), legal publishers, and law firms.

The analysis starts with a discussion of technical platforms that host an increasing number of social phenomena based on an ever more pervasive participatory culture or ‘connectivity culture’. The sociality that emerges in these networks is found to be a significant source of their sustainability in the presence of the vanishing marginal cost in the production, reproduction, and distribution of digitized information, while raising questions about issues such as value and privacy. A discussion of the software open source movement, and of the broader category of Commons-based peer production is presented: this helps locate the OpenLaws sustainability issues within a broader framework where the roles of PAs, enterprises, and especially users are quickly changing. This analysis is complemented by an economic anthropology characterization of Economy as formed by four domains of value: market, capital, social relationships, and commons. As these insights, although helpful, still fall short of providing a quantifiable way to translate social value into monetizable economic value, the report extends the analysis to a deeper level of enquiry, namely the ontology of money itself. A sociological perspective on monetary theory provides useful insights into mutual credit systems that have existed at different times in history and at very different economic scales, and enables their characterization as non-capitalist markets. The theoretical analysis is complemented with empirical evidence from existing mutual credit systems, from existing networks of lawyers and their sustainability models, and from several examples from the ‘sharing economy’. These are examined and discussed specifically with the OpenLaws community-based crowdsourcing approach in mind.

Straddling monetized and free service provision, such as ‘freemium’ models, is one strategy that seems to work reasonably well among private-sector stakeholders. But when access to PSI and OD in the form of legislative and case history databases becomes the core of the necessarily free knowledge offering, it becomes increasingly difficult for private-sector companies and third-sector legal entities to achieve a sustainable model for its provision. Although PAs are meant to rely on tax revenue, in times of austerity this can be challenging. Further, the need to account for and protect social values such as democratic participation in the overall sustainability model becomes more apparent or, better, urgent. The need to arrive at a constructive balance between the social and the economic spheres within the context of the OpenLaws project means that market imperatives overlap democratic participation imperatives. Furthermore, since the strategy adopted by OpenLaws is to rely on crowdsourcing and open innovation dynamics, the success of the BOLD initiative needs to contend also with community-building imperatives.

The report argues that it is impossible to meet these sometimes conflicting sets of imperatives solely with a neoclassical/neoliberal economic perspective. The sustainability model cannot just be ‘economic’, but must be ‘socio-economic’. Further, it must leave room for a ‘political’ dimension in order to prepare the ground for the governance framework for the BOLD OpenLaws community of stakeholders. The socio-economic framework proposed in the final chapter, although based on a radical innovation in the form of a complementary currency supporting a non-capitalist market, is compatible with the capitalist economy and with profit-based business models. The coexistence of such radically different economic and monetary models cannot help but make the general public more aware of the fact that money does not have to be taken for granted, that it is subject to design like any other (social) technology, and that different designs carry different consequences for the economy and society. This greater awareness of the interdependence of the social and economic dimensions of society goes hand-in-hand with the objective of OpenLaws to improve access to legal data in the interest of greater democratic participation and sustainability.

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## 1 INTRODUCTION

The OpenLaws project is concerned with Big, Open, Legal Data (BOLD) and in particular with making legal public sector information (PSI) more easily accessible to a range of stakeholders: citizens, private-sector legal information businesses, not-for-profit companies (and/or third sector non-profit charities), public-sector institutions managing PSI databases, law firms, and legal information publishing houses. In the context of this project, this report is tasked with the development and definition of a socio-economic framework that can address the sustainability of the wider OpenLaws community as defined by all these stakeholders.

### 1.1 Technology and Neoclassical Economics

This report takes as a useful point of departure Richard Susskind's book *The End of Lawyers?* (Susskind 2010), for several reasons that we touch on in these introductory remarks. In this book Susskind continues the future-casting exercise for the law profession that he started in previous books, such as *The Future of Law* (Susskind 1998). By his own admission,<sup>1</sup> his perspective is to a significant extent technologically deterministic: progress in information technology (IT) has changed the law profession and is going to change it ever more, until it will become unrecognizable to the lawyers of the 20th Century. The OpenLaws project has a wider scope than lawyers and the law profession, which motivates a critique of Susskind's work. But the project touches Susskind's work on two counts.

First, from a technological perspective OpenLaws could be said to contribute to the realization of Susskind's vision and to be aligned with it. The project assumes the existence of the web in the same way that lawyers 30 years ago assumed the existence of telephones, telex machines, and the postal service. This is consistent with Susskind's earliest predictions on the ubiquity of IT. The project is also contributing to the harmonization of a network of legislative and case history databases throughout Europe through methodologies and semantic technologies that originated in artificial intelligence research 40-50 years ago. Susskind's D Phil thesis from the late 1980s was on legal expert systems. Finally, the project is developing an app and web interface to these databases that will make access possible through any kind of fixed or smart mobile device. This is to some extent a disintermediation of the lower value-added services provided by lawyers and of some of the knowledge services they charge for through new information and communications technologies (ICTs), again as predicted by Susskind 20 years ago. However, this point should be tempered by factoring in the growing size and complexity of regulation. Even full-time specialists with highly developed legal skills cannot keep up with developments (identifying relevant rules, applying them, constructing meaning) across the board. In law firms, PAs, and universities this has caused a large degree of specialization.

Second, OpenLaws assumes that the cost of the information it is trying to make more accessible should be zero because it is public-sector information (PSI). Arguably, the price of services and apps that various stakeholders have developed or will develop in support of this accessibility should be vanishingly small. However, we should not forget that even the fact that the product cost may reach zero does not necessarily imply that the service provided should also be zero: the price depends on the value added.<sup>2</sup> Nonetheless, a number of the objectives of OpenLaws are consistent with Susskind's predictions about the radically decreasing costs and the general trend towards disintermediation of legal services brought about by new ICTs. In fact, to some extent OpenLaws realizes what to lawyers might appear like the worst of Susskind's predictions, where the lawyers become redundant and 'the delivery of legal services will be a very different business when financed and managed by non-lawyers' (Susskind 2010: 10). As we do in other parts of this report, however, we should distinguish between

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<sup>1</sup> 'While it is tempting (for me at least) that most change will be driven very largely by technology itself, to concentrate only on IT would be to let the tail wag the dog. ... I now see that it is important also to factor in the disposition of lawyers and, crucially, broader trends in the legal market.' (Susskind 2010: 22)

<sup>2</sup> See Gladwell (2009) for an interesting critique of Anderson's book *Free* (2009).

what is a consequence of the economic crisis and what is a structural challenge of the legal profession (mostly related to ICT). As summed up by an article in *The Economist* (2014),

The economic forces driving high-flying legal eagles into the bargain bin are no mystery. Demand for corporate legal work on such things as mergers, takeovers and share and bond issues plummeted in the 2008-09 recession, and has yet to recover. Simultaneously, the easy profits once earned in litigation departments have also dried up: the tedious task of reviewing mountains of documents, which law firms used to farm out to battalions of newly qualified associates, can increasingly be done by computers. (*The Economist* 2014)

The OpenLaws project overlaps with Susskind's vision also as concerns the concept of innovative business models that appear to be required in the changing environment, although not necessarily in what is meant by 'innovation'. Susskind's analysis is built on a foundation of neoclassical economics rationality and assumes a neoliberal business context. Thus, the development of new technologies that enable and facilitate the standardization, systematizing, packaging, and finally commoditization of many if not all legal services should be seen as causing an inevitable drop in the cost of legal service provision (see also Rifkin 2014); therefore, in order to remain profitable, legal firms should embrace these inevitable changes in the way their clients communicate and work, and evolve along with the technology. In other words, Susskind offers an optimization strategy of the legal profession in the presence of unavoidable technical change that is referred entirely to pricing, from bespoke consultant work charged by the hour to 'high-volume' and low-cost semi-automated online services.

Because the OpenLaws community includes a significantly wider range of stakeholders than lawyers and law firms, the project needs to cater to a much wider set of requirements and expectations, only some of which are business-oriented or 'monetizable'. This, therefore, forces an enlargement in perspective. For example, the project definition already included open innovation (Chesbrough 2003) and crowdsourcing (Howe 2006) at the proposal stage, but this report goes significantly farther. To name one reason, established approaches that have in one way or another grown out of the Open Source movement (see for example Benkler 2006) have not, so far, led to sustainable models for Open Data (OD) and PSI knowledge sharing.

Thus, this report is tasked with the development of a framework that can convincingly address the sustainability of the community. As we argue in the different chapters to follow, this calls for a deeper and wider study than Susskind's – although probably not to the same level of detail and sheer volume of information about the legal IT field. In any case, Susskind's work remains very valuable to this effort because it provides a familiar starting point for a study that must extend beyond legal informatics into several social science disciplines.

**Innovation.** According to the prevailing understanding, 'innovation' refers to new kinds of technology and/or business models that can change or disrupt an existing set of business models, creating new revenue flows and sources of wealth creation. For example, crowdsourcing legal annotations of BOLD databases could displace established legal publishers. From the point of view of social science and of this report in particular, on the other hand, 'innovation' refers to a better integration of the governance, social, and economic dimensions of a given sector.

Clearly, this perspective becomes particularly important where the sector in question is expected to involve a community of users and aims to increase citizens' democratic participation (cf. Von Hippel 2005), as in the OpenLaws case. The crucial difference is that whereas in the former case the sustainability needs of private sector stakeholders are prioritized due to their larger perceived economic role, in the latter case the sustainability needs of the private sector stakeholders are put on par with the sustainability needs of the *public commons*, represented as a combination of the Open Data and the community processes of annotation and *democratic participation*. This report is motivated by this latter view.

## 1.2 The Wider Perspective Required for BOLD/PSI Sustainability

On page xlix of the Introduction to the Paperback Edition, Susskind says something extremely interesting in that it demonstrates an awareness of a dimension of business that does not fit within the neoliberal model. In reference to the reaction of law firms to the recent financial crisis, Susskind writes

Those [firms] that have fired (this is no place for euphemisms) high-performing loyal staff because their areas of work have dried up will not for many years, if ever again, command undiluted loyalty amongst their junior people. In contrast, those firms where partners have made serious sacrifices to keep their staff in employment are those whose reputation is now high and will attract and retain the best talent in the future. (Susskind 2010: xlix)

This is an example where social value trumps economic rationality, in spite of the fact that the longer-term benefits brought by the former are far from certain.

‘Neoliberal’ generally refers to a belief that small government, a low corporate tax burden, and a ‘free’ market are sufficient to stimulate growth of the economy, gradually rising the standard of living for all concerned. As argued by Piketty (2014), the result of the neoliberal policies advocated by Reagan in the US and Thatcher in the UK appear instead to have led to a huge rise in inequality over the past 30 years, back to pre-World War I levels in most of the industrialized countries. Sidestepping the somewhat tired political debates that have been raging for centuries around this point, the challenge that OpenLaws faces is that much of the data and the information it is supposed to make accessible is and should remain free. As discussed later in the report, neoliberal business models are at odds with community building and democratic participation values. Therefore, simply put, it is far from clear how the actors involved with its provision, annotation, and delivery – and especially public sector actors – can achieve sustainability in a neoliberal context.

Straddling monetized and free service provision, such as ‘freemium’ models and the like, is one strategy that seems to work reasonably well among private-sector stakeholders. But when access to PSI and OD in the form of legislative and case history databases becomes the core of the necessarily free knowledge offering, it becomes increasingly difficult for private-sector companies – and, significantly, for Public Administrations (PAs)<sup>3</sup> and third sector actors – to extract a revenue from its provision. Further, the need to account for and protect social values such as democratic participation in the overall sustainability model becomes more urgent.

In other words, the need to arrive at a constructive balance between the social and the economic spheres within the context of the OpenLaws project means that market imperatives cross democratic participation imperatives. Furthermore, since the strategy adopted by OpenLaws is to rely on crowd-sourcing and open innovation dynamics, the success of the BOLD initiative needs to contend also with community-building imperatives. This leads to the need for a governance framework, which will be presented and discussed in a second report (D2.3.d2).

**Requirements.** In this report we argue that it is impossible to meet these sometimes conflicting sets of imperatives with a neoclassical/neoliberal economic perspective. The sustainability model cannot just be ‘economic’, but must be ‘socio-economic’. Further, it must leave room for a ‘political’ dimension in order to prepare the ground for the governance framework for the BOLD OpenLaws community of stakeholders. Thus, our motivation is ‘functional’ – rather than ‘ideological’ – in the sense that our work is informed by the need to arrive at a minimum set of properties the socio-economic framework underpinning the BOLD community must harbour in order to achieve universal PSI accessibility without harming economic productivity. The answer we propose begins with a strengthening of social cohesion. The best outcome – achievable in principle but hard to implement – is a framework in which

<sup>3</sup> Since the public sector is not supposed to compete with the private sector, this point may appear moot: PAs should derive funds for the provision of PSI through tax revenue. However, some PAs find that their budgets are insufficient and are looking for additional sources of sustainability, as discussed at a recent Share-PSI event.



the social and the economic spheres, and the governance sphere to boot, all reinforce each other in a *virtual circle*.

### 1.3 Disintermediation and the Importance of Inclusiveness

There is a third, more subtle point on which OpenLaws and Susskind's work intersect. It is probably safe to say that without the world-wide web and the blossoming of related technologies over the past 20 years it would be too difficult and too expensive to make PSI and legal OD easily accessible. Thus, giving credit its due, the need for innovation in the social, economic, and community governance directions that constitutes one of the guiding principles of the OpenLaws project should be seen as building on and to a significant extent as triggered by ICT innovation, rather than in contraposition to it.

However, this report relies on social science concepts and analysis that may be unfamiliar to the OpenLaws stakeholders to document the implications for socio-economic innovation brought about by the enlargement of the community to include Citizens, in addition to Clients or Consumers. Therefore, another reason for using Susskind's work as a reference and a starting point in the discussion is that he uses a language such stakeholders are familiar with.

We are living in a different world relative to 20-30 years ago, in part due to effects of technological processes foretold by Susskind. But in our view the next 20-30 years are likely to see a similar degree of transformation in socio-economic and political organization as the prevailing neoclassical and neoliberal economic model is – probably only in part – ‘creatively destroyed’ by a wide and growing range of non-capitalist alternatives. Rather than the process of disintermediation produced by the purely technical innovation and leading to ever-lower prices as described by Susskind, the (partial) creative destruction of capitalism should be seen as good news. Socio-economic and governance innovation, in fact, needs to be *inclusive* of all stakeholders in order to achieve sustainability, while remaining sensitive to purely economic concerns. The winners after this second wave of innovation, therefore, will be those stakeholders that are able to think outside the neoclassical/neoliberal box.

**Inclusiveness.** The neoclassical/neoliberal and the commons-based perspectives outlined above need to coexist and reinforce each other. The OpenLaws socio-economic framework needs to be *inclusive*.

### 1.4 Overview of Report

The report is structured as follows. Chapter 2 analyses recent technological and economic innovation in the online context from a sociological and media and communications point of view. Several examples that are relevant to OpenLaws are discussed. Chapter 3 explores a few different perspectives on possible socio-economic frameworks for sustainability of OD. For example, it uses economic anthropology to explain how Economy can usefully be subdivided into four domains of value, of which the Market and Capital are only two. Although this conceptual and analytical step is necessary to understand socio-economic phenomena such as open source without apologising for the incommensurability of their constituent processes, it is not sufficient to critique the ontological basis of the economic part of the equation. The chapter, therefore, argues that to achieve sustainability of OD and PSI it is necessary to rethink one of the apparently most innocent assumptions of neoclassical economics and neoliberal business models – i.e. the ontology of money as a neutral medium of exchange. Chapter 4 continues with a more empirical focus and reports on legal online networks and communities, as well as relevant experiences from the open source movement.

The objective of Chapters 2-4 is to build relevant knowledge at the level of the components of a sustainability framework. This should be understood as an effort at two different levels:

- 1- at the theoretical level we wish to achieve as much clarity as possible on capitalist and non-capitalist modes of exchange;
- 2- at the practical level we need to arrive at a workable framework/model that takes into account as much as possible what we have learned from the theory, but that also addresses the short-term needs of the community.

Chapter 5 then brings these components together at a systemic level in the form of a few possible BOLD socio-economic frameworks that the community can choose from, or can use as examples to do something different again. Finally, Chapter 6 draws some conclusions and suggestions for next steps.

**Why Legal Open Data?** As they endeavour to satisfy the requirements laid out in the 2003/2013 PSI Directive (Directive 2013/37/EU), some national and local governments are struggling to understand how to quantify the “return” on the investment made with public funds to make open data, indeed, open. In the context of OpenLaws this broad question can be made more specific by asking, for example, ‘*What is the socio-economic value of the rule of law?*’ The answer is far from clear, mainly because it necessarily addresses different kinds of value: a well-governed and democratic society is likely to be more productive, in terms of GDP, than a failed state or a state where corruption is endemic, so there is clearly a link to quantifiable measures of value. But there are also other kinds of “social value” that have hitherto been difficult or impossible to quantify. Although this report cannot hope to address such a difficult question, some of the theoretical points we make have some relevance in this direction and will hopefully motivate further debate and exploration.

## 2 ENGINEERING SOCIALITY AND ECONOMICS IN A CONNECTIVITY CULTURE

### 2.1 Communication, Platforms and Sociality

Information and Communication Technologies (ICT) such as the Internet, are said to have historically coevolved with the public who uses them, as well as with the larger economy of inscription. Put aptly by Gitelman (2006:7), who has provided ample evidence about media and ICT more broadly, they can be defined ‘as socially realized structures of communication, where structures include both technological forms and their associated protocols, and where communication is a cultural practice, a ritualized collocation of different people on the same mental map, sharing or engaged with popular ontologies of representation’.

Over time the deployment of ICT tends to change. For example, in the early 1990s the World Wide Web was seen as the basis of a new type of networked communication such as Weblogs and list-servers that, until the turn of the millennium, were mostly generic services that one could join or utilize to build groups, but the service itself would not automatically connect its members. However, with the advent of what has been termed ‘Web 2.0’<sup>4</sup>, this all changed. Widely adopted in the scholarly literature, the term Web 2.0 can be seen to point to a shift from a static perspective on Web content delivery towards a more dynamic perspective, where Web tools, applications and services are put into the hands of people who are regarded as participants rather than as end-users. In other words, online services are said to have shifted from providing channels for networked communication to offering, or being platforms for networked sociality (Castells 2007).

In its ability to connect people across time and space, the power of online is rooted in facilitating a range of easily accessible and scalable channels through which interactions can occur. It includes systems that support one-to-one, one-to-many, and many-to-many interactions. Many of these kinds of interactions opened up a myriad of new possibilities for online connections, supporting the generation of ‘digital spaces’ for people to gather, participate and create, and publics to form (e.g. performative innovation, networked publics). As the Web 2.0 evolved, and platforms and users moved more everyday activities to online platforms, thereby highlighting the mutual constitution of the construction of platforms and social practices, a shift became apparent from providing a utility to providing a customized service.

In fact, increasingly platforms can be seen to build different niches of sociality and creativity, or commerce, often underpinned by starting out in one particular domain and gradually developing a multi-platform strategy trying to contain and cater to (various) user groups. Evidently, (social) platforms, rather than being finished products, are dynamic objects that are tweaked in response to their users’ needs and their owners’ objectives, but also in reaction to competing platforms (Feenberg, 2009). Let’s take a closer look at these aspects.

### 2.2 Participatory Turn

Over the last decade, diverse lines of research, ranging from media and communications, to business, law, and economics, can all be seen to engage with the study of the increasing activity of users on the Internet associated with Web 2.0. In these literatures, participation, collectivism, and creativity are shared keywords or features offering a new, or alternative, logic of production-consumption configurations. To some degree, these literatures assume that user participation with particular attention to their creative and collaborative practices on – often, commercial (or corporate-hosted) – digital platforms, are empowering and are the way of the future benefitting democracy, culture, law, labour, and creative expression (cf. Fisher 2010; van der Graaf 2015). As a result, many terms, concepts, and models have been developed to capture the dynamics and logic of user participation on

<sup>4</sup> The term was first used by Tim O’Reilly in 2003 (<http://www.oreilly.com/pub/a/web2/archive/what-is-web-20.html>)

platforms, such as ‘convergence culture’ (Jenkins 2006); ‘culture of connectivity’ (van Dijck 2013); ‘like economy’ (Gerlitz and Helmond 2013); ‘produsage’ (Bruns 2008); and ‘wikinomics’<sup>5</sup> (Tapscott and Williams 2006).

In the tradition of media and communication studies, people have always been approached as engaging in the production of meaning, whether of cultural texts, corporate intentions, or the technology itself. Of particular interest is the linkage between user creativity and commercial practice where ‘production’ has been perceived as ‘culturalized’. This ‘culturalization of production’ has tended to perceive ‘culture’ as an extensible (or, modifiable) aspect of an existing (media) product, highlighting experiences and practices of consumption. Thus, initially, the corporation was viewed as the sole producer of products and audiences/users were seen as producers of meanings in relation to the product/text. However, especially since the 1990s research has shown that users are producers of meanings *and* texts, coinciding with a growing scholarly interest in not only documenting practices of consumption but also examining aspects of production.

With the proliferation of digital technologies, especially (social) platforms, debates have been reactivated about the role of commerce vis-à-vis (transgressive) user practices (cf. van der Graaf 2012). More specifically, digital technologies are said to have blurred the lines between producer, distributor, and consumer to a far greater extent than was the case in previous media forms, facilitating those diverse practices on a wider scale and engaging firms to look at the consequences for commercial interests. Within this context, Jenkins (2006) coined the terms ‘convergence culture’ to point to the interplay between the structured commercial agenda of firms and the, generally, differently purposed agenda and appropriations of users within participatory communities. As a result, the logic by which both firms and users process information and (media) content is said to have altered. Jenkins’s work encapsulates, therefore, the relationship between a top-down firm-driven and a bottom-up user-driven process involving Web-based participatory platforms that can be viewed as emerging sites for revenue opportunities, expanding markets, and re-enforcing consumer commitments. A different perspective is offered by the term ‘produsage’ (Bruns 2008), and which signals a move away from industrial practices towards ‘user-led online environments’. More specifically, it describes an information-based model rather than a trichotomous industrial model of production, distribution, and consumption. From this viewpoint, the status of the product (as information and/or intangible) is understood as a dynamic that is collaboratively produced by participants who are all producers and users, or producers, of information and knowledge making, in Bruns view, the term ‘product’ is obsolete.

In these views, for some researchers people are empowered in contemporary digital production practices. They are seen as migratory, socially connected, and resistant, describing a ‘collective intelligence’ where users have more control over the flow of information. Thus, while some treat users as market-based entities of production, others understand the shifting digital landscape as a ‘commons(-like)’ and public affair (Ostrom 1990, see Section 4.1). For example, Benkler (2006) deemed user participation as an important social, political, and economic force in the emergence of the ‘networked information economy’. And this, in his vision, made the contemporary production system

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<sup>5</sup> With the term wikinomics Tapscott and Williams (2006) aim to capture the commercial application of user participation or, ‘mass collaboration’, gearing towards a new business paradigm. They see mass collaboration as a new mode to harness knowledge that drives innovation and growth and promises a more efficient and effective usage of human skill, intellect, and originality. They argue that successful firms, ‘are like a hub for innovation and a magnet for uniquely qualified minds. They focus their internal staff on value integration and orchestration and treat the world as their R&D department. All of this adds up to a new kind of collaborative enterprise – an ecosystem of peers that is constantly shaping and reshaping clusters of knowledge and capability to compete on a global basis’ (Tapscott and Williams, 2006: 290). Although Tapscott and Williams (2006) stay away from discussing the underlying dynamics of mass collaboration in a commercial setting, they do develop a case that identifies and embraces mass collaboration as an open business model. On the basis of various (at times, anecdotal) examples such as Google, InnoCentive, and YouTube, several trends and methods are highlighted that are based on the principles of openness, collaboration (peering), sharing, and global acting and are claimed to assist in enhancing a firm’s competitive advantage. However, in their depiction of mass collaboration as the way of the future, that is, as the way people are going to spend their working and private lives and businesses are going to operate, wikinomics reads more as a manifesto than as a well-designed and researched insight into the meeting between the firm and users (cf. van Dijck and Nieborg, 2009).

more transparent and malleable by stressing the efficacy of individuals in a more democratic culture of nonmarket-based participation and self-reflexivity. By pointing to, among others, the organization of production in free and open source software such as Wikipedia that does not rely on markets or managerial hierarchies, Benkler illustrates an increasing ‘commons-based peer production’ of information, knowledge, and culture which is “radically decentralized, collaborative, and nonproprietary” (Benkler 2006: 60). He makes an interesting case for such a Web-based information network (or, ‘alternative mode of production’) as a public sphere, leveraging particular political and social freedoms by overcoming many of the bottlenecks associated with shifts in publicness contextualized in terms of democratic theory (see Section 3.1). Rifkin (2014) brings this thinking path to its extreme by picturing a future society in which common-based peer production (which he calls Collaborative Commons) will substitute the neo-capitalist system or vertical-integrated companies and will open a new economic era where people will produce and exchange in horizontal peer-networks not only information, but also energy and goods. Benkler and Rifkin are discussed again in Chapter 3.

In management and economic studies, a focus can be detected on issues of accessibility and the diffusion of knowledge (or, value amplification associated with network effects), and the processes by which corporations administer the transformation of obtained knowledge – outside the corporation’s boundaries, via users – into clearly defined competences, capabilities and (economic) value. Consulting with users has become an important focal point for corporations (cf. ‘democratizing innovation’ in Von Hippel 2005). In a more traditional view of manufacturer-centric innovation, corporations undertake most of the product/service development, while in the ‘users-as-innovators’ model people become part of the stages of idea generation and development that are often enabled and supported by firm-provided toolsets, highlighting their innovation capabilities. In this way, users are presented with a broader palette to participate, shifting the locus of the corporation-user interface while contributing to the product/service development of the organization. By inviting and, in many cases, facilitating user participation innovation becomes (relatively) open and distributed, challenging the more standard division of labour between corporations and users, urging corporations to adopt new or, alternative, business models and forms of organization and management.

Research in the fields of business and marketing has shown an interest in emerging (or, altered) business models underpinned by an ideological paradigm shift from producer-power to user-power, and from corporation-provided content to user-generated content that, arguably, restructures post-industrial societies and post-service economies (van Dijck and Nieborg 2009). A particular focus on terms such as collectivism can be detected as a means to harness knowledge (‘wikinomics’, Tapscott and Williams 2006) and to produce value, alluding to a more efficient and effective usage of human skill, intellect, and originality. As a result, business models of ‘co-creation’ seem to rapidly replace more hierarchical business model of producer-consumer (Prahalad and Ramaswamy 2004), arguably justifying the blurring boundaries between collective, non-market (public) and commercial, market (private) modes of production, and between proprietary (closed) and non-proprietary (open) hardware and software platforms (van Dijck 2013).

Albeit from different socio-economic disciplines, these studies have concentrated on several important issues and posited valuable insights into this so-called participatory turn, where all, to varying extents, argue that user participation on digital platforms evokes a reconfiguration of firm-user dynamics. Increasingly, therefore, attention is directed to questions concerning, for example, what happens when ‘community norms’ are put to use in a wider context of ‘sociality and commerce’. This is briefly outlined next.

### 2.3 Researching Sociality as a Resource

In understanding the co-evolution of ‘sociality as a resource’ and ‘ICT’ (or platforms), generally two perspectives can be discerned: the administrative, or instrumental, approach and the critical approach, each guided by its own research agenda highlighting particular values and actions in the cultural, social, political and economic domains (Mansell 2012). The distinction is not clear-cut. In the context

of ICT research, the administrative approach tends to focus on the hardware, of ICT and on aspects related to the mastery of such technological and social systems, while a critical view tends to focus on the symbolism of technologies and their applications, and on aspects of the diversity of information production and consumption. More specifically, the administrative stream can be seen to veer in its understanding of ICT towards a progressive means of benefitting the economy via an inclusive technology advantaging democracy, while the critical stance tends to give precedence to the political dimension, such as unequal power relationships over opportunities of resistance.

A closer look at the various literatures that engage with ICTs enables us to distil a user-centric and network-centric analytical framework (Langlois 2013). The user-centric framework centre-stages the linkage between technology and empowerment. It highlights the centrality of people supported by ICTs in creation and exchange practices, fostering new ways of expression, meanings, representations, and so forth. The platform itself is of lesser importance other than as an enabling and facilitating technology associated with more opportunities for participation and agency. The network-centric framework tends to focus on the examination of networked conditions and regulations underpinning the dispersion of information on the platform. In other words, research tends to address the technical elements of the infrastructure – or, the processes of transmission – vis-à-vis political and economic dynamics, which tends to yield insights into governance issues involved in network control. For example, legal, political and economic struggles can be detected about deep packet inspection and the monitoring of illegal downloads, etc., which are currently being played out. Research of this kind shows the way the “conditions of networking” are (re)formed by political and economic interests that are said to endanger or limit the extent of user participation and agency, drawing attention to issues such as privacy and surveillance.

Following this way of conceptualizing the “fabric of connectivity cultures”, they are approached as embedded (user-centric and network-centric) relationships between conceptualizations of technology, users, content, ownership, governance, and business models. The following themes highlight the analytical fabric associated with ICTs. These dimensions can be broadly defined by the dynamics of empowerment and commodification,<sup>6</sup> and underpin ‘sociality as a resource’ in the context of BOLD and which is further fleshed out in Chapters 3 and 4.

### 2.3.1 *Community and commodification*

The rise of sociality witnessed in the emergence and adoption of an increasingly large number of platforms and size of user base has yielded a complex ecosystem where both community dynamics and commerce can be seen to intersect.

The various lines of investigation into “participation” and (which often involves) a range of creative practices, tend to highlight a ‘new economy’ where a new configuration is said to exist between corporations and users associated with technological and organizational innovation. In other words, the association of user participation with novel configurations of corporation-user relationships may yield substantial market value. In the capacity of joining the market and user participation together, opportunities for innovation and learning that potentially benefit (the growth of) the firm may be distilled. In this regard, creativity, as a mode of innovation and an area of economic activity, is not understood on an individual basis but rather is a process that is evoked in a context and organization of actants, knowledge, networks, and technologies (Pratt 2004). Thus, participation in production (and consumption) practices consists of networks of practitioners stressing ‘information feedback’ over individual preferences or price signals, suggesting a move beyond the investigation of ‘media power’ towards the ‘growth of knowledge’ (Potts et al. 2008).

In fact, increasingly, a growing number of corporations look at the (emergent) properties of user participation in online communities, such as social networking sites like Facebook, to acquire, engage,

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<sup>6</sup> We should clarify that ‘commodification’ is different from ‘commoditization’. The former refers to a process where previously free or public goods are subsumed to a profit-based market exchange logic, thereby becoming commodities. The latter refers to a process whereby previously custom or specialized, and therefore high-price, products and services are reclassified or naturally evolve into low-cost, mass-market, and/or automated products and services.

and retain customers. Communities are viewed as meeting points for firms and users where knowledge and information can be generated and exchanged and transactions executed. In this marriage of commerce to customer loyalty user participation in the firm-hosted setting holds the ‘key to wisdom’. More specifically, the rise of user creativity is said to downplay professional expertise associated with a closed and proprietary-based understanding of the firm, favouring the growth of knowledge associated with open networks encompassing all participants, across firm boundaries. User participation practices on the firm-hosted platform is said to produce knowledge that may create learning opportunities for the firm. These converging firm-user dynamics occurring in communities, or networks, of practice draw attention to the importance of the role of knowledge in social and economic development, stressing the ‘need to continuously harness new technologies and processes to develop knowledge societies that are people-centred’ (Unesco 2007: 1).

Since the early 1990s a substantial literature can be observed focusing on the role of communities in knowledge production and innovation that, in various research contexts, is informed by concepts such as epistemic communities, communities of consumption, and communities of practice (CoP). In particular, the last one has been applied in management and organization studies drawing attention to a knowledge-based view of the firm built around communities. Lave and Wenger (1991) originally developed the notion of CoP to understand learning as a situated activity outside the formal education system, thereby offering an understanding of learning as a social process encapsulating a group of people engaged in a shared practice. Their learning model involves a process of ‘legitimate peripheral participation’ which highlights an interdependent relationship between being a newcomer and being an insider in the community. It draws attention to ways in which outsiders become new participants and learn (preferred) ways of participating, reframing their ways of thinking, interests, shared practices, and identities, and so forth binding the community.

The importance of communities as facilitators of knowledge production, sharing, and application has, especially since the mid-1990s, coincided with a move in theories of the firm towards a knowledge-based view of the firm. In this knowledge-based view, the production of knowledge is understood as the most important resource, or activity, of the firm and is a key source for competitive advantage (Nonaka 1991; Teece 1998). The success of firms or individuals is reflected in their capability to learn associated with the generation, exchange and utilization of new knowledge, competence, and skills; it can be said that the firm or individuals generate wealth in proportion to their capacity to learn and share their creations (Foray 2004). A knowledge-based view of the firm increasingly recognizes communities as effective organizational means enabling and facilitating complex (tacit) knowledge sharing. Communities have been documented to support (voluntary) knowledge sharing, inform the development of relationships, nurture new knowledge, stimulate innovation, and share knowledge within and across firm boundaries (Wenger 1998). The knowledge-based perspective understands learning as an interactive process where knowledge is a collective asset dispersed among networked firms and individuals, while enhancing competences of both.

User-driven practices associated with these knowledge communities seem to point to a kind of “talented economy” where “work” and “play” appear to become increasingly blurred, drawing attention to user practices, not as mere play, consumption and entertainment, but rather as working for free, which can lead to entrepreneurship and competition with the platform-providing firm. This kind of mixture of personal and professional identities has raised many questions about the labour and exploitation associated with the blurred boundaries of production and consumption. Approaching user engagement practices as a form of labour is not new, yet it has become salient in the context of ICT. The kinds of inputs provided by users are said to provide “value” to the platform and/or the corporation hosting it as well as to the (extended) community at large through their – in many cases, freely shared – knowledge and labour contributions (Terranova 2000).<sup>7</sup>

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<sup>7</sup> For example, game modders operate in a firm-hosted community from which the game corporation continuously seeks to benefit, albeit by proxy. Firms regard mod practices as attractive resources for free brand creation à la game-turned-mod-turned-commercial-title Counter-Strike (Valve Inc.), extensions of the game’s shelf-life, increased loyalty, innovation, and recruitment, while users seem to be drawn by activities such as problem solving, hacking, self-expression, and portfolio-

Overall, digital platforms are mostly praised for their generative features that inform the dynamic relationship between user as input and user innovation as output. This generative capacity is one that thrives on unexpected and unfiltered modifications and contributions made by all kinds of users (Zittrain 2008). In this effort to invite users to participate and co-create, the more closed production and innovation model is giving way to a more open, distributed and modular model, often crossing the boundaries of the firm. As a result, market and non-market relations play an increasingly constitutive role in society and economy. What is at stake may, arguably, not be the commodification of the ‘social’ but rather how the co-evolution of the social and economic relations is framed.<sup>8</sup>

There is research interest in so-called multi-sided platform business models that include users who participate and contribute to the platform, offering a greater potential for (market) growth by harnessing the (entrepreneurial) drive of participating users underpinned by the enabling platform. Contributing users have this constellation space at their disposal to work in, negotiate with, and reconfigure. The firm can thus strategically access the knowledge provided that once was outside its boundaries. Such a multi-sided platform approach highlights a more collaborative setup, on the one hand, and a more competitive one, on the other.

The relationship between the organization of within-firm resources and external user-driven resources suggests the likelihood for multiple centres of social and creativity-related activity, competition and compensation to occur, where the firm and users rub shoulders in different formations, moving attention away from the fluidity of firm boundaries to platform boundaries. This then seems to draw attention to the potential for the co-evolution of participation and competition to occur, which may offer opportunities for competition (and compensation) for all participating stakeholders.

### 2.3.2 *Personal information, power and privacy*

Using, or participating, in online platforms like Google and Facebook is not risk-free. In studies mapping differences in ‘offline’ and ‘online’ risk perception, the offline realm seems to be associated with higher awareness of risks, such as crime, than the online domain. However, people feel less in control online as they tend to be more afraid of unknown or new risks rather than more familiar ones. In addition, research has shown that typically people perceive a greater risk when finances are concerned, such as online banking and making online purchases, more so than when, for example, using search engines or social networks. Yet, particularly the latter has become a common practice. Sharing data on social networks has become an important part of the everyday lives of a wide majority of people. In this activity, they share a myriad of ‘volunteered’ data, such as photos, videos, texts, Web queries, likes, and are ‘observed’ by a variety of Web services through various applications like browser cookies or location trackers which record a gigantic mass of online behavioural data (or, ‘inferred data’). From volunteered and observed (behavioural) data, numerous online services automatically infer new information and build user profiles that are sold to third parties, and which underpin the core of emergent business models (cf. Pierson 2012). And, with often-changing Terms of Service people have to remain diligent about the public nature of their data (directly via the platform or third-party services and applications such as extraction techniques, aggregators and advertising networks), and understand, if allowed, how to configure their privacy settings.

People are often not fully aware of the economic potential of their participation and contributions. Hence, increasingly an appeal is made and tools developed that raise this awareness in order for people to understand and control the way their data is being repurposed through automatic inference

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building. Questions are also raised about the implications of this greater user agency for the labour and employment conditions of professionals..

<sup>8</sup> Whereas both users and firms actively appropriate and rework digital resources, it is typically only the firm that can claim full rights over their products/services. Issues of artistic appropriation and ‘fair use’ are firmly on the agenda but legal scholarship can also be seen to concentrate on the underlying code of social platforms rather than on mere user experiences. The rights of users (as creators) tend to be bound by a site’s End-User License Agreement (EULA) that typically denies the user any type of ownership and, as such, contributes to an unbalanced arrangement of firm-user relationships in product and service development. In general, it may be said that users find themselves in the peculiar situation of being in the business of creating proprietary experiences (bound by the firm’s soft/hardware) that can be commercial and non-commercial proprietary extensions of the firm-developed product or service.



and subsequently monetized. This has coincided with examining the role of algorithms that is seen as a key logic of the information ecosystem governing the flows of information on which people and corporations seem to increasingly depend (Beer 2009; Gillespie 2014; Halavais 2008). In fact, data processing capabilities available to corporations and those available to users are imbalanced in favour of the corporation, drawing attention to a situation that determines a democratization of content production and sharing but not of the means for users to manage and control their content. This is evidenced, for example, by some 74% of Europeans that find that they do not have enough control over their own data that they chose to put online and share with others, while some 70% is concerned with the way their data are handled by organizations that have access to them (EC 2012).

In using (firm-hosted) platforms, people trust their personal data to corporations; put aptly by van Dijck (2014: 197) ‘metadata and data have become a regular currency for citizens to pay for their communication services and security – a trade-off that has nestled into the comfort zone of most people.’ Moreover, it is said that people tend to be willing to provide personal information in exchange for social or economic benefits like convenience and gift vouchers. However, they can also be seen to try to control over what information they give away by adopting ways to protect themselves from certain risks – or, corporate surveillance practices (Cohen forthcoming 2015) – asserting ‘right of ownership’ over their data; for example, falsifying or withholding information or by using certain technology-based protection strategies. Thus, people are said to make inconsistent privacy-relevant decisions and assign different values to their data privacy depending on ‘whether they consider the amount of money they would accept to disclose otherwise private information, or the amount of money they would pay to protect otherwise public information’ vis-à-vis ‘the order in which they consider different offers for that data’ (Acquisti, John, and Loewenstein 2010: 1).

Against this backdrop, the ubiquity of the ‘participatory turn’ is both an opportunity and a challenge for their users but also for regulators, and important shifts with regard to current data handling practices are expected in the context of legislation around the globe associated with terms like ‘privacy and data protection by design’, ‘personal data ecosystems’ (with formats such as ‘personal data store’, ‘locker’ or ‘vault’ turning people from ‘data subjects’ into ‘data producers’, or ‘controllers’). For example, the EU General Data Protection Regulation, if finally passed, aims to provide a legal framework that enables the user to better control and understand the way her/his data are handled online and be able to control the use of her/his content – volunteered, observed or inferred – by third parties whereas this is not currently the case (e.g. via default settings).

## 2.4 Public Sector Information

The EU legislature has created a framework meant to stimulate wider use of public sector information in the shape of the Public Sector Information Directive (2003/98/EC), which was updated by the Directive 2013/37/EU, henceforth referred to jointly as the PSI Directive for convenience.

The objective of the PSI Directive is to harmonize various national practices on the re-use of public data. The Directive does not mandate the sharing of public data, but rather concentrates on the economic aspect of such sharing by establishing conditions in which public entities will be able to release information. An important over-reaching element to be found is a desire to encourage the cross-border sharing of public information to enable other organizations to make use of the data to produce value-added products, making sure that the sharing does not act as a distorting force for existing players in the market.

The PSI Directive contains various elements that can be relevant to OpenLaws. The key element is that it mandates Member States to allow re-use of public sector information, and that terms of use must be transparent. There is a shift towards the use of open licences, particularly when taking into consideration the Guidelines on recommended standard licences, datasets and charging for the reuse of documents (European Commission 2014), which explicitly favours the use of standard open licences such as Creative Commons in the release of public sector information.

Another element of note contained in the PSI Directive is to establish limits on the charges to the public for re-use, which has to be shared with a ceiling calculated on the basis of actual costs of managing and extracting the information. In particular, public sector bodies need to calculate charges per re-use in a way so that the total income from charging does not exceed marginal costs incurred to produce and disseminate the information, together with a reasonable return on investment. Some exceptions to this rule have to be calculated with objective, transparent and verifiable criteria.

Another important element of the PSI Directive is to establish conditions for re-use that are non-discriminatory for comparable categories of re-use. This is one of the biggest concerns of the Directive, which aims to create a level playing field for the private sector. Without a provision on equal treatment of re-users, the legislators feared a serious potential for public sector bodies to distort markets and engage in unfair competition. While it is permissible for public bodies to re-use their data for the provision of (commercial) value-added services, it is made clear that there is a prohibition of cross-subsidies. If a public sector body re-uses its documents to offer added-value information services on the market outside the scope of its public task (i.e. acts as a re-user), it has to be subject to the same charges and other conditions that apply to re-users engaged in similar activities.

Public sector bodies are also in principle prohibited from entering into exclusive arrangements with re-users. Exclusive deals can only be authorized in exceptional circumstances if they are necessary to provide services in the public interest, and only if they do not disturb the market negatively.

## 2.5 Big, Open, Legal Data (BOLD)

Open data has evolved to a much discussed notion, in politics, business, and beyond. Among the leading arguments of its advocates is the potential, in terms of public and economic value: ‘The Commission has launched an OD Strategy, expected to deliver a €40 billion boost to the EU's economy each year’ (European Commission 2011); ‘enormous potential to create more accountable, efficient, responsive, and effective governments and businesses’ (G8 2013: 1). However, not only does its hailed economic impact remain insufficiently established on a macroeconomic level, also on the microeconomic level uncertainty prevails, in terms of adapting existing and especially creating novel, innovative business models (cf. Buchholtz, Bukowski, & Śniegocki 2014).

The aim here is then to provide an understanding of the key terms and to provide suggestions for establishing sustainable Open Data ecosystems, with the intention to link or reconcile the definition of Open Data (and public value arising thereof) with business models and commercial activity.

### 2.5.1 *(Linked) Open Data*

In principle, any data can be(come) open, the prevailing definition being that ‘a piece of data or content is open if anyone is free to use, reuse, and redistribute it’ without restriction (Okfn, n.d.). It is claimed to be good for society, in terms of democracy, economy, efficiency and other aspects along that line. At the heart of the current debate lies Open Government Data (OGD), ‘produced or commissioned by government or government controlled entities’ (Goedertier 2013: 10): statistics, information about public-service-delivery, science, finances, etc. (Okfn, n.d.). In fact, the commonly used notion of Open Data relates to OGD more often than not: Janssen et al (2012: 259) define OD ‘as non-privacy-restricted and non-confidential data which is produced with public money and is made available without any restrictions on its usage or distribution’ (ibid). OGD can therefore be defined as a public good, marked by non-excludability and non-rivalry: access to the data ‘cannot represent a source of competitive advantage per se’ (Ferro and Osella 2013: 2).

Linked open data goes beyond openness in its nature, its benefits, but also in its complexity. Linking OD increases the potential by semantically enriching it, extending fragmented parts of information to bigger knowledge domains. It also renders processes more difficult, in particular on the supply side: the setting of rules and standards, their implementation and application, the creation of links and the integration of data. All this can probably not be achieved by one organization alone. In fact, it might

only be properly effected by a coordinated ecosystem of diverse actors, if it is not even too complicated to be sustainable at all (cf. Milicic 2011).

In an ecosystem, the public sector plays a structural role for (Linked)OD, as governments and adjacent organisations already possess substantial amounts of data, collected as part of their function. They also constitute the main funding source for respective projects. Today, ‘the prevalent business model [...] is the one where investment and maintenance costs are covered through on-going public funding’ (Goedertier 2013: 6). Public resources are limited, though; financially, and more importantly also in terms of expertise. For establishing and maintaining a sustainable Linked OD environment in the long term, therefore, combining public and private efforts probably yields most preferable outcomes, also in terms of the hailed impact in society.

But how can a public good such as OD be subject to commercial activity, without curtailing openness and forestalling the generation of public value beyond revenue for some companies? For (Linked)OD, a gap prevails between publishing and reuse, i.e. supply and demand, which needs to be bridged through appropriate infrastructures and tools, to create value also for a mainstream audience. In other words, to have any impact, the data must not only be open, but accessible and usable (cf. Goldstein and Dyson 2013: xi). Facilitating the making accessible and usable could be outsourced to the private sector. Ferro and Osella (2013) offer a meaningful framework for identifying roles of commercial actors in this process. They argue that, on the one hand, enablers facilitate use of data (e.g. through retrieval, storage, categorisation, exposure) “behind the scenes”. Re-users, “on the front line”, on the other hand, utilize the data as part of their own value proposition.

A prominent example of enablers of OGD is Socrata, a Seattle-based company that offers an advanced open-data platform. Their solution is considered to be a successful example in the US and implemented at various levels of government, and the company has been extending its customer base to Europe’s public sector.<sup>9</sup> Also the collaboration between Portland’s transit agency (TriMet) and Google is a best practice, from which GTFS originated, that is, the General Transit Feed Specifications, nowadays the most widely used standard for open transit data. The UK’s Statute Law database is another example of how commercial actors can collaborate with governmental and non-profit actors in enabling the use of OD (in this case UK’s statute law). Examples of “OD front line” actors include, Stat.io which is a young company that offers open socio-economic data in a highly accessible fashion (based on a map) – for free – and extends services for those who are willing to pay subscription fees. Mapbox, Google Maps’ rival, offers highly customisable maps used by Foursquare and other popular services. It is mainly based on OD from OpenStreetMaps and NASA, but combines it with proprietary sources. Such intersection of OD with private, restricted information for new goods or services promises viable business models. Through the right licenses, companies could be charged for combining data in ways that generate revenue for them. The current situation suggests that commercial incentives add substantially to the viability and sustainability of O(G)D-related initiatives.

In the context of OGD, responsible public sector organisations occupy a central position, but they can only oversee a limited number of roles, and they are dependent on expertise from the outside. Enablers, i.e. companies holding core competencies in the ecosystem, will execute decisive roles. Interaction between private and public efforts is necessary, but allocating too much control to a corporate partner might also risk that the partner and its commercial objectives become the dictating driving force, as the ecosystem tends to co-evolve and align itself with the directions set by the central actor.

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<sup>9</sup> <http://www.govtech.com/data/Open-Data-Goes-Mainstream-Accelerates-Success-for-Socrata.html>

### 3 THE CHALLENGE OF NEOLIBERAL BUSINESS MODELS IN SUPPORTING OPEN DATA COMMUNITIES

#### 3.1 Introduction

In this part of the report we start looking at the problem of sustainability of OD business models from a point of view that prioritizes the social and economic dimensions over technology. More precisely, having acknowledged in the previous chapter the digital or online dimension of modern society along with its effects on community dynamics and on price levels especially for knowledge-related services, we can now take them as a given and can focus on what is left: the social and economic dynamics in an area of social and economic activity that straddles free/open and proprietary knowledge.

If we use the catch-all phrase ‘knowledge economy’, then we are referring not just to open and proprietary data, but also open and proprietary software. This is relevant because business models that integrate open source and proprietary software have been around for 15-20 years by now. Thus, it makes sense to build on that experience in the development of knowledge services that, likewise, straddle open and proprietary data. Furthermore, access to online data manifestly requires software of one kind or another, such that software companies are natural stakeholders and can leverage their own direct experience in developing sustainable business models in this hybrid environment.

As seen earlier, however, there is a (relatively) new element, namely the presence of government as a major PSI or OD stakeholder. This is even clearer in the case of legal data in the OpenLaws context. As evidenced by recent initiatives such as Share-PSI,<sup>10</sup> the issue of OD sustainability concerns public sector stakeholders at least as much as the private sector. This calls for a wide scope in the social science analysis and research approach adopted to address this challenge.

This chapter will culminate with the realization that economic exchange is mediated by social relations, in the sense that money’s ontology as debt (or credit, depending on the point of view) is fundamentally social – although the fact that this debt is indefinitely assignable quickly makes it impossible to trace the original credit-debt social relation. Since the ultimate guarantor of this debt is the state and since in democratic societies the authority of the state derives from a Commons constituted by, among other things, shared democratic values, we cannot escape the paradoxical conclusion that money and the economy are – or ought to be in democratic societies – built on a Commons. *This insight inverts the widespread perception that the sustainability of the social sphere depends on the economic sphere* and, on that basis, will give us a starting point for a sustainable socio-economic framework for PSI, OD, and BOLD in particular, in Chapter 5.

Accordingly, in this chapter we give a brief overview of the social science context in the form of several works from: information and intellectual property law (Benkler 2004, 2006); economic and social theory (Rifkin 2014); economic anthropology (Gudeman 2001); and economic history/monetary theory/economic sociology (Amato and Fantacci 2012; Ingham 2004). The intent is to show that theoretical attempts such as Benkler’s commons-based peer production (2006) or the economics of sharing (2004) – as interesting and innovative as they were ten years ago when they were formulated – fall a bit short of what’s needed to reach socio-economic sustainability for OD. In the later sections of the chapter we therefore develop a more ‘fundamental’ analysis of the socio-economic context upon which to build such sustainability models by including the medium of exchange, unit of account, and store of value as one of the analytical variables in the integrated approach at the socio-economic framework that is outlined in Chapter 5.

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<sup>10</sup> <http://www.w3.org/2013/share-psi/>

### 3.2 Commons-Based Peer Production

Benkler's work, in particular his *Wealth of Networks* book (Benkler 2006), is a broad and insightful critique and commentary on how the information society characterized by the Internet is finding its bearings in the presence of the market-based incumbents of the knowledge economy, especially in the area of cultural production. After pointing out a shift that has been on-going for about 100 years towards an economy centred on information production, and that has greatly been accelerated by the Internet, Benkler argues convincingly for the growing importance of non-market modes of production:

What characterizes the networked information economy is that decentralized individual action – specifically, new and important cooperative and coordinate action carried out through radically distributed, nonmarket mechanisms that do not depend on proprietary strategies – plays a much greater role than it did, or could have, in the industrial information economy. (Benkler, 2006: 3)

And has some negative things to say about the market view of information:

Even as opulence increases in the wealthier economies – as information and innovation offer longer and healthier lives that are enriched by better access to information, knowledge, and culture – in many places, life expectancy is decreasing, morbidity is increasing, and illiteracy remains rampant. Some, although by no means all, of this global injustice is due to the fact that we have come to rely ever-more exclusively on proprietary business models of the industrial economy to provide some of the most basic information components of human development. (Benkler, 2006: 14)

However, his view ultimately balances market and non-market action:

This is not to say that property is in some sense inherently bad. Property, together with contract, is the core institutional component of markets, and a core institutional element of liberal societies. ... Commons are another core institutional component of freedom of action in free societies, but they are structured to enable action that is not based on exclusive control over the resources necessary for action. ... Each institutional framework – property and commons – allows for a certain freedom of action and a certain degree of predictability of access to resources. Their complementary coexistence and relative salience as institutional frameworks for action determine the relative reach of the market and the domain of nonmarket action, both individual and social, in the resources they govern and the activities that depend on access to those resources. (Benkler, 2006: 24)

In his book Benkler then makes general suggestions that are relevant to political and regulatory perspectives, in the interest of protecting individual liberal-democratic freedoms. His work focuses on highlighting the freedoms of individuals in the informational public sphere, on how such freedoms affect the ability of individuals to provide and receive information outside the market, and on what the government might do about the encroachment of the market on these freedoms and ability. In other words, Benkler is concerned with building a protective wall to enable the new modes of production enabled by the Internet to flourish.

Benkler's emphasis on the legal and institutional dimensions of the commons builds on the tradition of Elinor Ostrom (1990), discussed further in Chapter 4. Unlike Ostrom, Benkler's work is not synthetic, and in his analysis he stops short of defining a new concept of economy. He says value is being created outside the market but then does not provide a 'place' where such value can flow, other than the social and the cultural, by default. He seems to keep the categories 'social', 'cultural', and 'economic' separate and does not attempt the development of a unifying framework, although he provides many tantalizing examples of productive interactions across these domains. In this chapter we suggest that such a deeper level of integration may bring us closer to unlocking the very significant amounts of value generated by the new Internet-enabled phenomena, of which BOLD and PSI are two examples. Whether we can then translate it into a more productive and measurable interaction with the capitalist market economy is an additional, and more difficult, question that this report aims to make a positive contribution towards.

If Benkler fails to recognize a ‘place’ where the value of the commons can flow, Rifkin – in his recent book *The Zero Marginal Cost Society* (2014) – forecasts that, in a few years, the Commons will become the new economic model, drastically reducing the space of capitalist transactions. According to Rifkin, different economic periods are determined by, and based upon, a given combination of three elements: energy infrastructure, communication infrastructure and logistics infrastructure.<sup>11</sup> These three elements are reciprocally dependent on each other and determine a socio-economic paradigm in the Khunian sense of the term. By changing these elements we can see the emergence of new economic regimes. At the present stage, the author says, we are moving from a paradigm based on fossil energy – involving traditional communication media (TV, newspapers, etc.) and centralized logistics, which privileges the development of large, vertically-integrated enterprises – to a new combination based on renewable energy – involving the Internet of Things and distributed logistics. In this new paradigm, the ‘prosumers’ will be the real protagonists: they will produce autonomously renewable energy exchanging it via a smart grid, will produce goods with free, open source-based 3D printers (and other methods), and will communicate through the Internet.

Rifkin describes the story of capitalism and its relationship with the Commons, showing how the two models have been co-existing for centuries and how the Commons can be seen as a valid economic model of production (see Chapter 4). The shift from the old paradigm to the new one is determined by the technological developments in recent years: new technologies increase productivity and bring a reduction in marginal costs. Technologies, and particularly the Internet, demonstrate now that it is possible to develop and distribute music, books, videos, and goods, but also training courses, with a marginal cost very close to zero. Possible examples are: YouTube, self-publishing platforms, Etsy and MOOCs. If the marginal cost tends to zero, so does the price, and therefore the profit. This pushes companies to change and look for new business models in order to protect their position in the market, but it also shows the contradictions of the current situation and the potential shift towards a more commons-based peer production society.

Moreover, the technology is determining the loss of many jobs due to technological substitutions. The scenario for the future sees more and more persons without a job, so that consumption will be reduced at the macro level and products will cost less and less. Large, vertically integrated companies will not be able to cope with this scenario. From Rifkin’s point of view people will rely more on peer-to-peer free production and less on the market for fulfilling their needs, in this way reducing the space of the capitalist market. Of course the author is well-aware of the fact that large companies and governments will have a crucial role in shaping this future scenario, especially in guaranteeing free access for all to the new infrastructures.

It is out of the scope of this report to go deeper in the analysis of this scenario, *but what is potentially relevant for OpenLaws is the fact that non-market, non-capitalist models of production and distribution are on the political and economic agenda of global and local players*. How to make sustainable the new paradigm is an important research topic, especially in the current period of transition we are living through, where the old system has shown its contradictions but the new paradigm is still not a reality on a large scale. In the tradition of Polanyi’s critique of the ‘self-regulating market’ of the 19th Century (2001[1944]), economic anthropology has explored complementary perspectives, one of which is discussed next.

### 3.3 Economic Anthropology and the Four Domains of Value of Economy

The motivations for extending the scope of the concept of ‘economy’ beyond the market are various, ranging from political ideology to business innovation, but what could arguably be regarded as the most important motivation remains rather subtle and difficult to understand because it challenges the

<sup>11</sup> In this sense Rifkin follows a Marxian approach in which production elements constitute the ‘structure’, while cultural dynamics are sovrastructure elements dependent on the structure. This approach can be criticized as too linear and too mechanical; following a more systemic approach it is possible to say that infrastructures are socio-technical elements not separable by social processes.

preconception ‘Economy = Market’ that has by now become deeply ingrained in the collective consciousness. In other words, as long as we identify the economy with the market, most of the effort at policy level will, understandably, continue to focus on making the market work. The role of the social dimension will therefore remain unclear: as an output of the economy,<sup>12</sup> the social dimension ought to benefit from the market, at least in times of boom, but as an input to the economy it is widely recognized to be essential to business and economic health<sup>13</sup> while remaining incommensurate with it. This places societal concerns in a subordinate and confusing position relative to the economy: dependent on it while at the same time important for it but unable to contribute to GDP in a direct and quantifiable way.

The amount of work on the quantification and the economics of non-monetary incentives is significant. Especially in business environments innovative thinking has had positive effects on the interaction between private enterprise and society (Anderson 2006, 2009; Bruns 2008; Chesbrough 2003; Fisher 2010; Nonaka 1991; Prahalad and Ramazwamy 2004; Tapscott and Williams 2006). Over the past 30 years, corporate social responsibility (CSR) has gradually turned from spin and marketing strategy to good business. However, the quantification of social value remains a challenge that is at the root of the sustainability question for OD. In fact, governments and supra-national institutions such as the OECD and the European Union are investing in developing new statistical approaches able to capture the value generated by a given society beyond the GDP measure. Interestingly, these new approaches take well-being into account beyond its economic quantification, but keep all the valuations separate in ad hoc indices due to the impossibility to merge all the relevant information into a single, synthetic quantity. Therefore, also this approach seems so far to have failed to develop a synthetic vision of market and social aspects of wealth.

An extension of systemic economic relationships beyond the market has been developed within the field of economic anthropology (Hahn and Hart 2010), for example as discussed by Gudeman (2001). Economic anthropologists study the forms of value creation and exchange that characterize different human cultures, including the Western. All economies strike a balance of market or commodity-based production and exchange and non-market and commons-based production, sharing, and exchange, as Rifkin (2014) also says. But Gudeman proposes a more granular classification of value domains which, importantly, is also dependent on scale: (1) base or commons, (2) social relationships, (3) accumulation or capital, and (4) trade or market. In traditional, non-ICT economies the first two are prevalent at smaller scales and are closely associated with community, whereas the latter two tend to involve longer-distance interactions and are more impersonal. However, the domain of accumulation is equally important for community and for the market.

The dependence of the value domains on scale is well captured by Figure 1, which shows a schematic after Gudeman’s own graphic of how a local economy based on use-value and reciprocity relationships can interface to a wider market economy that can span and connect multiple communities. The diagram shows a rather intricate interdependence between different parts of the economy, of which the market is only a part and in which the value of social relationships can be recognized to have a central role. The terms on the right are examples of the categories shown on the left. In such an economic framework the market exchange of commodities coexists alongside other economic mechanisms such as the sharing of public goods, barter, gifting, and reciprocity. The figure also implies that different mechanisms are operating at different scales and in different institutional contexts.

Although Gudeman’s book is far from addressing every aspect of modern economies, it suggests a way to see our social and cultural dimensions through an economics lens. The relevance to the present

<sup>12</sup> This view comes from Marshall: ‘Political Economy or Economics is a study of mankind in the ordinary business of life; it examines that part of individual and social action which is most closely connected with the attainment and with the use of the material requisites of wellbeing. Thus it is on the one side a study of wealth; and on the other, and more important side, a part of the study of man’ (Marshall, 1890[1920]: I.I.1). In other words, in the neoclassical view a society of utility-maximizing rational agents will implicitly maximize also their social welfare.

<sup>13</sup> See for example Granovetter (1985) or Polanyi (2001[1944]).

discussion of such a unifying view lies in providing an example of crossing boundaries between disciplinary perspectives that have mostly been considered to be incommensurate. By legitimizing additional domains outside the market as integral parts of the economy, the latter is enlarged; and by showing how different domains of value can work together local economies are more likely to discover new sources of sustainability. In practical terms, the best approach we have found that might achieve this involves a rethinking of one of the most important institutions of capitalism, money – to which we now turn.

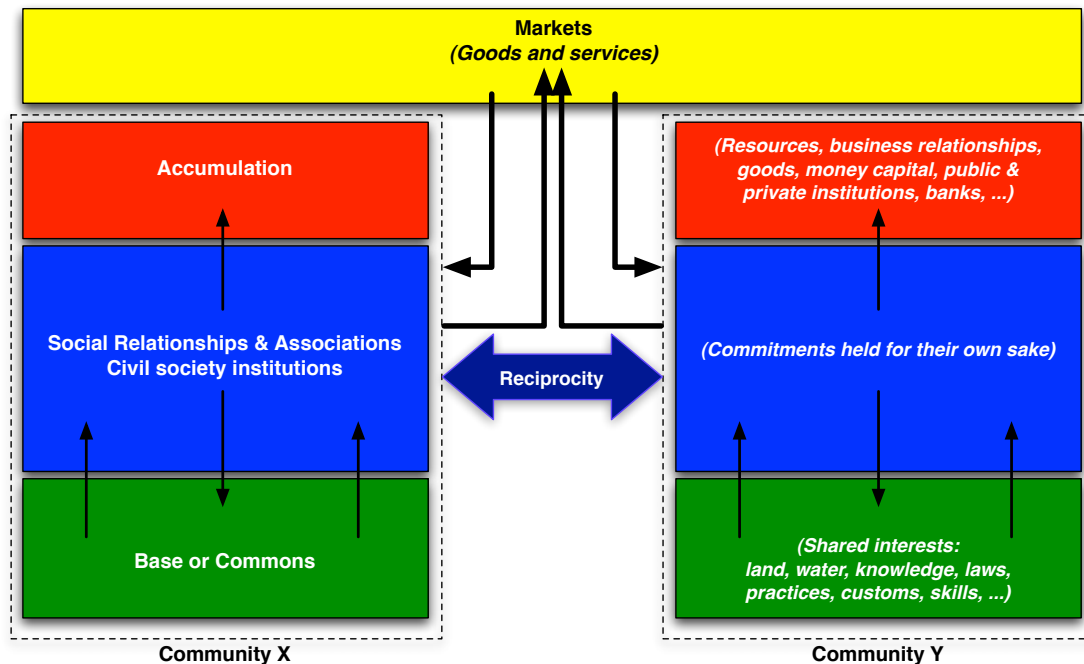


Figure 1: The four domains of value of the economy (based on Gudeman, 2001)

**A sustainability model for the Commons.** The remainder of this chapter covers a lot of territory and presents unfamiliar concepts, experiences, and theories. The reader should therefore try to remember that what this chapter is working towards is in essence a sustainability model for the Commons that is *compatible with* and *complementary to* the capitalist economy. The Commons in the context of OpenLaws is data: Open Data (OD), Legal Open Data (LOD) and, to a significant extent, also the value-added services derived from the annotation of LOD, i.e. Big Open Legal Data (BOLD); but it is also the democratic participation values that open access to the data implies and facilitates.

### 3.4 The Tension between Liquidity and Growth in Capitalism

This section looks at another interface between the domains of value, namely between the market and capital, which we might also characterize as the relationship between the ‘real’ economy and finance. Having established that ‘market’ and ‘economy’ are not synonymous, the next important insight is that ‘market’ and ‘capitalism’ are not necessarily synonymous *either*, in the sense that different kinds of markets exist and some are not capitalist. The reason this insight is important is that it opens the possibility for a third approach in the search for a framework for socio-economic sustainability: whereas Benkler focuses on non-market production and Gudeman highlights areas of economy that complement the market, this third perspective opens the possibility of a different kind of market, i.e. a non-capitalist one.

According to Marx, whereas in a non-capitalist market money is obtained from the sale of commodities and is then used to purchase other commodities (C-M-C) according to their ‘use value’,



in a capitalist market the emphasis is on the money and on ‘exchange value’: money is used to purchase commodities as an investment, with the expectation of making more money from their subsequent sale (M-C-M+). In a *financial* capitalist market the target of investment is other forms of money (M-M-M+). A useful definition of a non-capitalist market, even if arguably a bit reductive, is one in which the medium of exchange, money, is not itself a commodity (Amato and Fantacci 2012a). Thus, in a non-capitalist market there is no interest on debt or credit balances. The implication is that in such a market the role of finance is reduced to a minimum floor of activity and importance in its supporting role of the ‘real’ economy.

Our objective is to assess the possibility (hypothesis) that a non-capitalist market has a higher chance of facilitating the emergence of sustainable business models for OD and PSI than the prevailing capitalist market combined with neoliberal business models. In simple terms, this could be seen as a consequence of the fact that whereas in a capitalist market the profitability of trade and enterprise is forever competing with the return on investment (ROI) of various financial instruments and operations,<sup>14</sup> in a non-capitalist market the link between daily labour and economic survival is tighter and less “distracted” by other influences on the latter. A by-product of such scenario, which is of specific interest here, is that more room is left for other forms of value to emerge and influence the behaviour of the socio-economic actor-agents, for example ‘social value’, however we might wish to define it. The Sardex community currency (CC)<sup>15</sup> is a significant and recent empirical experience that is discussed below and that supports this conjecture.

As a counterweight to this account, we should acknowledge the dynamic nature of capitalism in its ability to expand credit by monetizing debt through various mechanisms such as banks’ fractional reserves or securitization: ‘The essence of capitalism lies in the elastic creation of money by means of readily transferable debt’ (Ingham 2004: 108). The fact that the total of all deposits (liabilities) cancels the total of all loans (assets) on the banks’ balance sheets in the entire system

gives the appearance that there exists a one-to-one relationship between deposits and loans ... However, the accountancy rules and conventions do not capture the *dynamic* money-creating role of capitalist banking. As the great French historian Marc Bloch observed, the ‘secret’ of capitalist system consists of ‘delaying payments and settlements and consistently making these deferrals overlap one another’. (Bloch 1954[1936], quoted in Arrighi 1994, quoted in Ingham 2004: 139-140, emphasis in original)

This somewhat abstract description is discussed more concretely in Section 3.6 in connection with the fractional reserve banking system.

Banks are not the only actors able to create credit-money. There is one form of securitization that can be seen as an example of the disintermediation of bank-created credit, whereby ‘enterprises raise money from outside the banking system by selling claims on their assets, including future income, directly to buyers’ (140). The capitalist creation of money by these mechanisms is of course consistent with, and in fact required by, the expectation to ‘make money’ implicit in the M-C-M+ and the M-M-M+ cycles.

When the market perception is optimistic (Keynes’s ‘animal spirits’), this liquidity enables very fast growth of the economy. However, unfortunately this kind of liquidity is also very fragile, because it depends to a significant extent on the market’s perception of the debtors’ ability to pay their debts and on depositors’ trust. Amato and Fantacci quote the same passage by Bloch, with the additional point that the modern capitalist system ‘could perhaps be most precisely defined as a system that would perish if all the accounts were settled at the same time’ (Bloch, 1954[1936], in Amato and Fantacci, 2012a: 59). Thus, it would be a very positive outcome if a financial system could be devised that exhibited the same characteristics of capitalism’s strong and dynamic growth but was robust in times

<sup>14</sup> For example, a significant part of the business activity of supermarket chains is *not* to sell food but, rather, investment banking of the revenue between the time of sale and the time the suppliers’ invoices are due, usually 3 months after delivery.

<sup>15</sup> [www.sardex.net](http://www.sardex.net) (see also Littera et al. 2014; Dini and Kioupiolis 2014)

of crisis, in the sense that it would shield ‘the common people’, the SMEs, and the non-financial markets from the huge liquidity and credit fluctuations of the latter. This was precisely the motivation behind the establishment of the WIR CC in Switzerland, in 1934, after which Sardex is partly modelled.

Although this discussion of the properties of capitalism may appear more relevant to a critique of fiscal policy, financial institutions, and accreditation agencies than to the problem of OD sustainability, the historical contingency of the recent financial crisis provides an important indirect link that might have otherwise gone unnoticed. Namely, as every other similar crisis since time immemorial, the 2007-08 banking crisis triggered a renewed interest and bottom-up activity in alternative economies<sup>16</sup> and, in particular, alternative currencies. One example is the creation in 2009 of the Sardex electronic mutual credit system on the island of Sardinia, Italy. Sardex has institutional characteristics<sup>17</sup> that make it almost unique among the thousands of examples of CCs that have existed throughout human history and that still exist in almost every country in the world, and that make it potentially relevant to OpenLaws and to the sustainability of OD. The next section provides a brief historical summary of similar complementary currency systems, in each of which specific choices were made about how to constitute the social relations in a market (in a set of exchange relations). Section 3.6 then explains why all this matters.

### 3.5 Sardex in the Context of Economic History

Ontologically, society is a moral community before it is a market. Wergeld symbolically represented society’s two faces. On the one hand, it attempted to quantify the functional contribution of social roles by the imposition of payments for the loss or impairment of the individual incumbents. On the other hand, these scales were informed by a codification of the values without which the attribution of functional worth to society would have remained anomic and anarchic. There would have been no means of resolving claims, counter-claims, and ‘blood feuds’. In other words, money has its origins in law. (Ingham 2004: 93)

Not surprisingly, there are many historical examples of non-capitalist markets, since after all capitalism is a relatively recent phenomenon or economic innovation. However, in this section we focus on a few examples from the modern era that have lived or are living side-by-side with capitalist money and capitalist markets – and this at very different scales.

#### 3.5.1 *Écu de Marc*

Amato and Fantacci (2012a) bring as the earliest such example of the modern era<sup>18</sup> the Écu de Marc, an international currency that was used to balance merchants’ accounts in Europe between 1533 and 1575. This was a money of account and was not subject to interest. The bankers who issued it made a profit by adjusting the exchange rates to their advantage. To get around the difficulty of defining an international currency while within a European country the Écu had validity only during the trade fairs, which were held in Lyon every three months. For the duration of the fair the building in which the fair was held and the transactions were carried out was ‘outside Europe’ by decree of the King of France.

#### 3.5.2 *European Payments Union*

A more recent example, on a larger scale in both geographical extent and volume of trade, was the European Payments Union (EPU), a creation of Keynes’s, which operated between 1950 and 1958 and is credited with the very fast recovery of Western Europe after WWII and, in particular, with the meteoric economic growth experienced by Germany and Italy. The purpose of the EPU was precisely

<sup>16</sup> ‘Solidarity economy’, Greece’s ‘potato movement’, various kinds of cooperatives. See also Gibson-Graham (2006) for other pre-crisis examples.

<sup>17</sup> (1) Scale: among CCs, only WIR is larger; (2) zero interest on all balances and non-exchangeability with any other currency; (3) 100% tax transparency and compliance, by contract.

<sup>18</sup> A similar credit-based system to those discussed here was used in Mesopotamia 3000 years ago (Ingham 2004; Graeber 2011), although the absence of alternative forms of financing at that time makes it difficult to identify the early examples of banking with modern mutual credit systems.

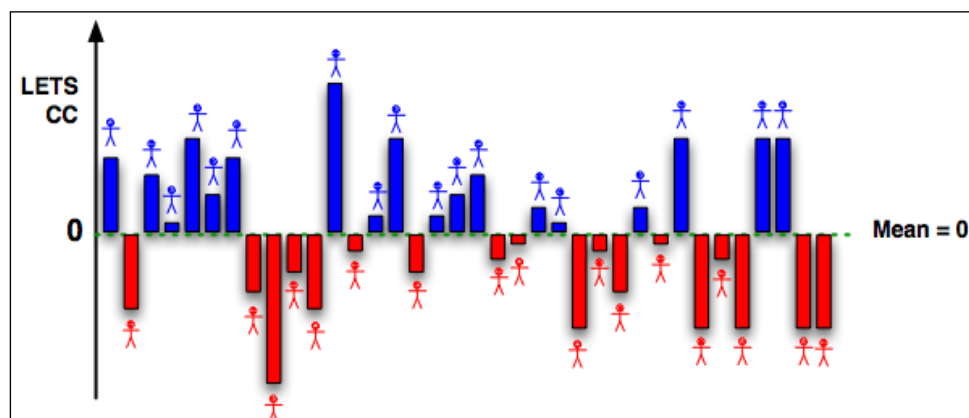
to bring Western Europe back to a level where it could be an equal partner to the US in the new international monetary system that had been agreed at Bretton Woods in 1944 (i.e. where it could repay the Marshall Plan loans). Accordingly, once Europe had reached that level, after only 8 years, the EPU was shut down in 1958 in spite of the fact that it was working so well to make way for the IMF and for the US dollar as the new international currency.

The reasons for replacing the EPU with the global IMF are not difficult to guess in the context of the Cold War, the geopolitical role of the US, and the power held by the entity that controls the creation of money. Be that as it may, the relevance of the EPU was that it was based on facilitating multilateral trade. Trade balances were not confined to bilateral transacting partners. A common international currency, the Bancor, was used to pay for the trades. Negative and positive balances were not between the partners but relative to the Bancor system as a whole. Negative balances did not accrue an interest charge, whereas positive balances were charged a small proportional fee that served to cover the fixed costs of operation and administration of the EPU system. This form of demurrage (Gesell 1934[1906]; Keynes 1936) was enough to guarantee that countries with a trade surplus would find ways to spend their surplus by buying goods from the countries with a trade deficit. The wisdom and effectiveness of this arrangement are particularly poignant in the context of the current Euro crisis, in particular comparing the difference between the trade balance of Germany with those of Italy, Greece, etc. The Écu de Marc and the Bancor are important as examples that a money of account that is a poor store of value by design and whose purpose is to support market activity are not limited to the local scale but can operate successfully at international level and for very large volumes of trade.

### 3.5.3 Local Exchange and Trading System (LETS)

At the opposite extreme is the Local Exchange and Trading System (LETS) CC, which normally operates between individuals and at the level of a small town or a neighbourhood. It was invented by Michael Linton during an economic slump in Canada in the early 1980s (Dini and Kioupkiolis 2014). As for the Écu de Marc and the Bancor, in a LETS system the total net amount of CC in a given community is exactly zero at all times (see Figure 2).

Someone who sells a product or service is credited with a positive (credit) balance of so-many units of CC, whereas whoever buys that product or service acquires a negative (debt) balance of the same amount. Both changes in position are (usually) effected electronically, so that in most LETS implementations no physical currency actually exchanges hands. Crucially, one does not need to hold a positive CC balance in order to make a purchase: his or her balance simply goes negative by the price of the item or service, the provider's balance simultaneously going positive by the same amount. In this manner, LETS creates money. However, since there is no interest on positive or negative balances there is no expectation of a 'return', which makes LETS a non-capitalist money.



**Figure 2: Idealized distribution of CC balances at one point in time within a given community using the LETS or Sardex systems**

### 3.5.4 *Wirtschaftsring (WIR)*

WIR is short for Wirtschaftsring, German for ‘economic circle’, but also means ‘we’ in German, emphasizing the community and solidarity aspects of the currency. WIR refers to the club or network as well as to the currency itself, which is nominally held at the same value as the Swiss Franc (CHF) to simplify accounting (the unit of account is equal to the CHF). WIR was founded in 1934, as a result of the money scarcity caused by the Great Depression in Switzerland (Studer 1998). It can be seen as a multilateral corporate barter exchange system. Unlike LETS, WIR is a large-scale B2B system that supports large transactions between companies and extends to all of Switzerland. The main differences to LETS are:

- WIR is mainly a B2B currency that was created specifically for small and medium-sized enterprises (SMEs), to make it easier for them to obtain credit especially in economic recessions.
- Whereas in LETS a member’s negative balance is a debt towards the community, in WIR it is a debt towards the central credit clearing house, which since 2004 is called WIR Bank.
- In addition to allowing members to acquire a negative balance when making a purchase, thereby ‘creating’ currency in a manner very similar to LETS, with the seller in the trade acquiring a corresponding positive balance, WIR also allows members to take out large and long-term loans, as large as house mortgages, for which interest (in CHF) is charged and collateral requested.
- WIR charges a 1% fee for each transaction whereas LETS transactions are usually free, implying the potential for long-term sustainability problems for the latter.

### 3.5.5 *Sardex*

As discussed in Dini and Koupkiolis (2014), Sardex is the name given to the Sardex credits as a unit of account, where 1 Sardex = 1 Euro, as well as to the company that provides the credit-clearing service. Rather than charging a fee per transaction it charges a yearly membership fee that varies from 200 Euro for small non-profit ‘social enterprises’ to 3000 Euro for large companies such as the electric utility company. For the moment, Sardex does not issue large loans such as mortgages. No interest is applied to any negative or positive balances. As in LETS and WIR, Sardex credits cannot be exchanged for the national currency. Unlike the LETS or WIR systems, in Sardex individual consumers cannot go negative, they need to have a positive credit balance in order to make a purchase. This can be obtained by accepting part of their salary in Sardex if they are working for a member company. The Sardex s.r.l. (‘Ltd’) bylaws dictate that all profit be reinvested in the company, which now counts approximately 15 employees.

Sardex brokers act as sale/purchase managers and consultants for participating businesses, and they closely and directly assist new members in their transactions and use of the network until they are confident enough to operate on their own. A major difference of Sardex in comparison to other local currency systems is that they established themselves formally as a company with a cultural-political project – a constructive response to the crisis – rather than relying on voluntarism which accounts for various failures of other complementary currencies. Similarly, the prevailing motivation of the 2500 member companies (to date) for joining the circuit was economic rather than ideological. Import substitution, which carries a negative non-competition connotation in mainstream economics, in Sardex brings an average increment of 10% in turnover to participating companies. Interestingly, as expressed during a round of interviews performed in July 2014 (Dini and Kioupkiolis 2014; Littera et al. 2014), some of the respondents ‘discovered’ a value in the social interactions with other members that they had not expected.

Transactions between members priced less than 1000 Euro must be performed in Sardex, whereas for higher amounts the transacting partners may negotiate a mutually convenient percentage of Euro and Sardex. The net increase in turnover makes it easier for Sardex members to agree to total tax transparency, by contract, where VAT on all transactions is calculated based on the total amount (Sardex + Euro, if applicable) but is paid entirely in Euro.

Having provided some general considerations on non-capitalist markets and a brief historical summary of a few experiments in alternative currencies, an explanation is now needed for how the analysis of

different *economic* systems this chapter started with has turned into an analysis of different *currency* systems. This, it turns out, is the heart of the matter.

### 3.6 The Social Nature of Money

Although money is considered a basic element of modern society, as a sociological category it remains unanalyzed. ... *The International Encyclopedia of the Social Sciences* devotes over thirty pages to money, but not one to its social characteristics. (Zelizer 1994: 4)

Inquiry into the nature of money was one of the most serious casualties of the increasing separation and fragmentation of the social sciences that was set in train around the turn of the nineteenth and twentieth centuries. ... Thus, in a remarkable paradox, arguably the most important institution in capitalist society received far less attention than it deserved. (Ingham 2004: 197)

Our thesis is, in essence, that the neoclassical – and Marxist – conception of money as a ‘neutral veil’ over the ‘real’ economy hides the nature of money as a social relation and, therefore, is at the root of the incommensurability between social value and economic value that has dogged open source and ‘free economy’<sup>19</sup> debates in recent years. The first part of this sentence (neutral veil) is very clearly explained by Ingham (2004) (also, Mellor (2010)) who draws on Weber, Simmel (2004[1900]), Keynes (1930), Knapp (1973[1924]), Schumpeter (1994[1954]) and many others; in the following, we rely heavily on Ingham. The second part of this sentence (incommensurability) is evident from the literature, for example Benkler’s work, even if it is not always stated in this manner. The more difficult claim is the causal link between the two. In this short section we distil the main components of an argument that attempts to prop up this claim.

#### 3.6.1 The Neutral Veil and the Commodity Nature of Money

Schumpeter explains the ‘neutral veil’ concept of neoclassical economics as follows:

So long as [money] functions normally, it does not affect the economic process, which behaves in the same way as it would in a barter economy: this is essentially what the concept of Neutral Money implies. Thus, money has been called a ‘garb’ or ‘veil’ of the things that really matter ... Not only can it be discarded whenever we are analyzing the fundamental features of the economic process but it must be discarded just as a veil must be drawn aside if we are to see the face behind it. Accordingly, money prices must give way to the exchange ratios between the commodities that are the really important thing behind money prices. (Schumpeter 1994[1954], cited in Ingham 2004: 17)

As explained by Ingham (19), money’s status as a neutral veil conflicts with its perception as a commodity by Aristotle, Hume, Marshall and mainstream economics more generally. In spite of this inconsistency, mainstream economics regards money as *both* a neutral veil and a medium of exchange.

In short, all orthodox economic accounts of money are *commodity-exchange* theories. Both money’s historical origins and logical conditions of existence are explained as the outcome of economic exchange in the market that evolves as a result of individual utility maximization. (19, emphasis in original)

The gradual abandonment of the gold standard from the late 19th Century up to President Nixon’s announcement in 1971 was a consequence of the increasing ratio between money in circulation and bank’s fractional reserves, and in particular the stock of gold held by the Fed, which made convertibility into gold increasingly meaningless. Thus, neoclassical economics’ rejection of ‘the idea that bank loans might create credit-money in the form of deposits that were relatively autonomous with respect to the stock of precious metal money’ (22) was rendered moot by practice.

This is essentially a refrain that is common to many disciplines and certainly not only to economics: practice and empirical fact tend to lead our ability to theorize them and explain them. In the case of economics, the insistence with which the social dimension of economy is carving a space for itself

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<sup>19</sup> See Anderson (2006, 2009)

alongside profit-based rationality seems to have increased in pitch since the advent of the Internet, Web 2.0, and certainly the contingency of the recent banking crisis.

### 3.6.2 *Money as Social Relation*

The development of a social theory of money that is as easily grasped as the perception of money as a commodity is still a topic of debate among sociologists (e.g. Ingham 2006) and in any case it is too difficult to summarize satisfactorily for the purposes of this report. In lieu of an exhaustive discussion, we list a few of its assumptions, insights, and consequences, principally based on Ingham's very eloquent book already cited (Ingham 2004). Our work will then consist of drawing together to the best of our ability the concepts and the historical and empirical evidence from the previous section to produce, in Chapter 5, a list of requirements and characteristics for the OpenLaws socio-economic framework for sustainability.

Arguably the most important sociological aspect of money is that it is the product of a power struggle: 'In capitalism, the pivotal struggle between creditors and debtors is centred on forging the real rate of interest ... that is politically acceptable and economically feasible' (198). As already stated, the power struggle is not of direct interest to the question of sustainability of the OpenLaws community. Rather, we are more interested in the statement that 'money is itself a social relation; that is to say, money is a "claim" or "credit" that is constituted by social relations that exist independently of the production and exchange of commodities' (12, emphasis in original). How is this possible? What does this mean?

There are two perspectives from which the sociological nature of money becomes apparent:

- 1- **Morality.** The credit-debt relation is a social relation in the sense that 'the supply and demand of credit-money creation is mediated by the norms of creditworthiness and morality of indebtedness' (77). Further, 'the economic ties that are constituted by the vast network of credits and debts fundamentally comprise a "moral" network that depends on the keeping of promises' (77).

- 2- **Power.**

Money is not only socially produced ... it is also *constituted* by the social relation of credit-debt. All money is debt in so far as issuers [banks] promise to accept their own money for *any* debt payment by *any* bearer of the money. The credibility of the promises forms a hierarchy of moneys that have degrees of acceptability. The state's sovereign issue of liabilities usually occupies the top place, as these are accepted in payment of taxes. (198, emphasis in original)

So the different kinds of money imply different kinds of debt. This hierarchy reflects the different risk levels associated with different borrowers and is recognizable by the difference in interest rates. Thus, as we might expect the money issued by the state is the most secure and has the lowest interest rate (called in fact the 'base rate'). At the opposite extreme, the money obtainable from payday lenders has a huge interest rate (for example, 700% now that the 3000-6000% rates have been outlawed in the UK<sup>20</sup>). The implication is that there is an inverse relation between risk and power. In other words, from a sociological perspective the interest rate borne by money at the time the loan is issued and, therefore, at the time the money is created can be seen as a quantification of the power differential between creditor and debtor.<sup>21</sup>

<sup>20</sup> In this article <http://www.bbc.co.uk/news/business-28305886> the UK Financial Conduct Authority (FCA) proposed a cap of approximately 270% APR, but a recent Satsuma (<http://www.satsumaloans.co.uk/>) TV ad was advertising around 700% APR.

<sup>21</sup> The absence of interest in Sardex, however, does not imply that all power relations vanish in such a circuit. In fact, a governance framework is still very much needed. They are simply not organized around money, or at least not in the same way as a capitalist economy.

### 3.6.3 Money as Debt

Even if the sociological nature of money becomes clearer from these perspectives, the fact that all money is debt still takes some effort to understand.

Money cannot be created without the simultaneous creation of debt. For money to *be* money presupposes the existence of a debt measured in money of account elsewhere in the social system and, most importantly, in the debt created by the issuer's promises to accept back its money in settlement. In other words, the money debt is *assignable* – or transferable, or negotiable. (72, emphasis in original)

The assignable property of money is reasonably clear, it is its creation that is more difficult to grasp. This can be understood most easily by imagining €100 deposit into a bank account. A 10% fractional reserve means that up to 90% of this deposit can be loaned out. Some of this €90 will find its way back to various other bank accounts, as deposits, but let's pretend for the sake of argument that all of it does. Therefore, 90% of that amount can be loaned out again, or €81. Repeating this process and infinite number of times results in a total of up to €1000 that can be loaned out – by a set of banks<sup>22</sup> – from the original €100 deposit. The difference of €900 is “new” money that did not exist before. This is one example of what is meant by ‘credit-money’. The €900, however, is also a debt that needs to be repaid (with interest). As the original €100 was also created in a similar way through previous transactions, or by the state as an increment in public debt, we can see why all money is debt.

The 10% fractional reserve system example brings out the power question more starkly. A venture capital investor can argue convincingly for the legitimacy of a return on his or her investment in a given company on the grounds of opportunity cost, i.e. the cost associated with alternative opportunities of investment that were lost when the investor gave a certain amount of money he or she was holding to that company rather than any other. By contrast, what opportunity is a bank issuing a loan missing if it did not have 90% of that money to begin with and is not allowed to loan out the remaining 10%? It would appear that this is enabled by a combination of factors: tradition carried over from a time when the gold standard was prevalent, reified perception of money as a commodity and, last but not least, a marked power differential between the bank and the loan applicant. The bank can do this because it has the power to. But where is this power coming from? Is it purely built on most people's ignorance of these subtler points of finance? It hardly seems likely, so let's continue the analysis.

Ingham writes something that is particularly important for us, because it mirrors the principle of operation of Sardex (and other community currencies such as WIR and LETS): ‘Money is created and destroyed through indebtedness and repayment, as in the double-entry balance sheet’ (83). In other words, it would appear that the founders of some of these alternative or complementary currencies have followed to the letter – whether wittingly or not – the sociological rather than the neoclassical economics definition of money, and have made it visible in how the mutual credit system is defined (e.g. as shown in Figure 2). This point is perhaps made clearer by Ingham's observation about the normal money system that, ‘[i]n accordance with the conventions of double-entry bookkeeping, the totals of deposits (liabilities) and loans (assets) in the *entire system* cancel each other’ (139).

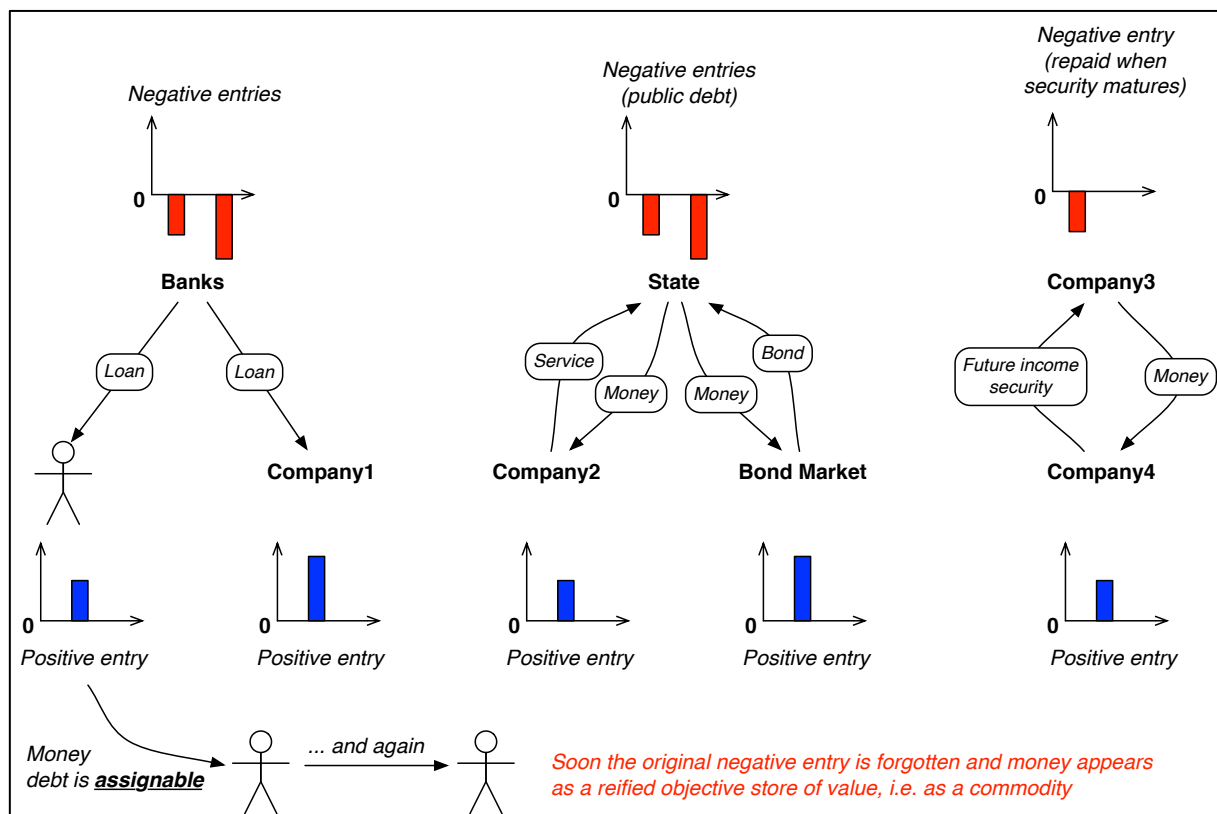
Figure 3 shows a cartoon schematization of the three main money creation processes that summarize the main points just discussed. On the left of the figure the cartoon shows money creation by banks, in the centre money creation by the state, and on the right money creation by a form of securitization. When the state creates money in payment of services received or through Quantitative Easing operations (buying bonds on the secondary market), and when banks create money by issuing loans,<sup>23</sup> an equal and opposite entry appears in their balance sheets. In the case of the state this is public debt. In the case of the banks, the figure shows the nominal account (money flow) rather than the financial

<sup>22</sup> This point is explained clearly by Douthwaite (1999: 20).

<sup>23</sup> The figure does not show the contract, as a reverse arrow from the recipient of the loan to the bank, by which the recipient assumes the responsibility to repay the loan at a given rate of interest. For example, this could be a mortgage which can then be securitized and sold off by the bank.

account, where the money loaned out would be shown as a positive ‘asset’. When the debt is repaid, the money disappears again.

As shown at the bottom of the figure, because money is (recursively) assignable debt the link between a given amount of money and the negative balance in a bank’s balance sheet that corresponds to it is quickly lost. Further, because our everyday experience of money is in the physical form of coins and notes,<sup>24</sup> the debt becomes reified and acquires a life of its own, reinforcing the historical perception of money as a tangible commodity and a store of value that triggers our tendency to hoard it as insurance against an unknowable future.<sup>25</sup>



**Figure 3: Different mechanisms of money creation and possible origin of its store of value perception**

### 3.6.4 Some Points of Discussion and Reflection

Leaving aside the store of value perception from its nature as debt, some of the money given out as a loan will indeed find its way back to the same or other banks. Thus, as discussed above it will become the basis for another loan. This is then what Bloch meant by ‘delaying payments and settlements and consistently making these deferrals overlap one another’, in Section 3.4 above: the new loan will mature *after* the previous one, even though they originated from the same initial deposit.

As another point of critical reflection, it should now be clear why the WIR, Sardex, and even EPU mutual credit systems are indeed money, since they make explicit the credit-debt relation through which all money is created. In fact, these currencies are *defined* as precisely such a relation. The fact that it is visible to everyone, however, further suggests that the users of such a currency are more likely to remember that what allows their market transactions to exist and thrive is a network of social relations.

<sup>24</sup> Only approximately 3% of all money is in the physical form of coins and notes, the rest is electronic.

<sup>25</sup> See Amato and Fantacci (2012a) for a similar argument.



Third, banks tend to use the financial accounting convention of regarding the negative balances created by their issuance of loans as ‘assets’, i.e. as positive balances. By contrast, when the government performs the same or similar operation its negative balance remains negative, and is called ‘public debt’.

Fourth, from the rather different perspective of biochemistry, the mechanism of money creation based on fractional reserves is mathematically very similar to autocatalytic reactions, which are explosively fast. It therefore starts to become clear why banks have this power: along with securitization, this system allows the capitalist economy to grow extremely fast – with the fragility qualifier already discussed. But there must be a reason for banks to go through the trouble of managing this very intense process, so the presence of interest on loans based on money that did not exist before starts to make sense. Of course, the normal explanation is based on the starting assumption that the capitalist system as a whole is legitimate, in which case interest can more simply be justified in terms of risk, in spite of the paradox of referring to risk of losing something (a significant part of) which did not exist before.

Fifth, as the historical record shows, this dynamic property of capitalism comes at a price. In addition to the boom and bust cycles already discussed, the power that banks have acquired in servicing capitalism can often interfere with their stated function to serve their customers, especially when their customers are companies in need of credit. More importantly, the perceived need for the autocatalytic function played by banks as the “engine” of capitalist growth has so far taken precedence over questions about how such a function can – or should – be integrated within the wider democratic system to which everyone else is accountable. The Basel III<sup>26</sup> agreement goes some way in this direction, but much more work is needed. In particular, the rationale for developing different banking and money mechanisms for different parts of the economy also begins to make sense.

### 3.6.5 *Money as Unit of Account and the State Theory*

There remain two characteristics of ‘sociological money’ that need to be established that are interrelated: the unit of account function and, crucially, the role of the state.

Money is uniquely specified as a *measure of abstract value* (money of account) (Keynes 1930; Grierson 1977; Hicks 1989; Hoover 1996); and as a *means of storing and transporting* this abstract value (for means of final payment or settlement of debt) (Knapp 1973[1924]). All the other functions – medium of exchange, for example – may be subsumed under these two attributes (Hicks 1989) ... Money of account is logically anterior to any form of money that bears the abstract value (Keynes 1930; Grierson 1977; Hoover 1996). (All citations in Ingham 2004: 70, emphasis in original)

Ingham explains that in Knapp’s state theory of money (1973[1924]) money is created by fiat, rather than through the bank loan mechanism.

By declaring what it will accept for the discharge of tax debt, assessed in the unit of account at the public pay offices, the state creates money. The state establishes the nominal unit of account and, in a metallic monetary system, fixes the conversion rates ... . In this way, the state establishes the ‘validity’ (Geltung) of money. ... Most importantly, money’s [validity] can be established *only* in relation to a nominal money of account. ... ‘[M]oneyness’ is conferred by money of account, which cannot be produced by the free interplay of economic interests in the market; it must be introduced by an ‘authority’. (Ingham 2004: 47-49, emphasis in original)

Ingham shows how the role first of the monarch and then of the state was fundamentally important in allowing the expansion of personal monetary relationships between merchants to widely accepted money and financial instruments within a monetary space. Thus, we see that public institutions played a very important role in the emergence of the modern capitalist state.

<sup>26</sup> <http://www.bis.org/bcbs/basel3.htm>

### 3.6.6 *Money as Commons in the Context of PSI Sustainability*

As explained by Mellor, the creation of (fiat) money used to be the prerogative of the state, but with the development of capitalism this function has been gradually taken over by banks with the credit-money creation mechanisms described above.

The shift of the issue of money through the privately owned banking system has also removed from the public sector any direct control over the direction of money use. This means that those who take on debt are making vital choices about the direction of the economy and, as the financial crisis reveals, those choices can rebound on society as a whole. (Mellor 2010: 25-26) ... Money may be socially based and publicly supported through the state [e.g. through the banks' bail-outs], but its control currently lies with the profit driven private sector. Understanding and challenging the ownership and control of money within capitalist economies is therefore vital. Far from being a 'private' matter, money should be treated as a public resource and should be used for social purposes, or at least be subject democratic control. (30)

Although OpenLaws is not concerned with the financial crisis, it is very much concerned with the sustainability of *Public Sector Information*. From Mellor's perspective perhaps it is not so surprising that finding sustainable business models for PSI and OD is proving challenging in modern capitalist economies. Perhaps OD and PSI could be more fruitfully linked to a different kind of money.

In summary, according to the sociological perspective *money is debt (or credit, depending on the point of view), a credit-debt relation is a social relation*, and that is why money is a social relation rather than a commodity or a neutral veil. A candidate money needs to pass at least another test before it can be considered such, and according to Ingham many community currencies do not make the grade: it must be validated by an authority, which in the modern world is the state, as settlement for tax debts. But this is exactly what WIR and Sardex ensure: the total tax transparency they require, therefore, acquires a deeper significance. Thus, Ingham is right in observing that the great majority of community currencies have difficulties in enforcing fiscal discipline, Sardex and WIR appear to belong to a different class. They are truly complementary currencies that protect the local economy from global credit fluctuations caused by liquidity crises, that contribute to GDP, and that, in addition, by guaranteeing fiscal transparency and compliance also reinforce the legitimacy of the state and of the national currency.

It would appear, therefore, that a Sardex-like complementary currency *ought* to be more compatible with the social and democratic value of OD and PSI than "normal" commodity money. In Chapter 5 we propose a socio-economic framework that aims to support equally the private sector-based and the public sector-based creation and exchange of value surrounding the generation, distribution, and access of OD and PSI. *The interesting aspect of this proposal is its apparent ability to sustain the different kinds of value that the private and the public sectors are concerned with and that, for OpenLaws, includes also democratic participation.*

## 4 P2P PRODUCTION, OPEN DATA AND SOCIAL NETWORKS WITHIN AND OUTSIDE THE LEGAL SYSTEM: EXAMPLES OF SOCIAL AND ECONOMIC SUSTAINABILITY

### 4.1 Introduction

In the previous chapter we have seen the challenges that Common-based production models face in terms of economic sustainability. We will – nevertheless – focus on some existing experiences in order to consider the solutions they developed in terms of economic and social sustainability. We will also map some of the already-existing solutions for lawyers (only a few of which can be considered commons-based production solutions) and we will describe the main topics emerging from their analysis.

This chapter is based on ethnographic activities, and should be considered complementary to the previous chapters in the sense that here we describe practical examples of socio-economic and technological processes that have been described in Chapters 2 and 3. Moreover, the examples reported here are complementary to the examples provided in Chapter 3 with reference to community currencies. In Chapter 5 we will see how the lessons learned from all these experiences and from the analysis of the literature can be re-combined for developing a socio-economic framework for OpenLaws able to influence positively its governance and business models. This chapter is particularly relevant for the social layer of OpenLaws which foresees, at least to a certain extent, a significant level of peer-to-peer collaboration among members for developing and exchanging law-related content.

As already mentioned above, commons-based production, or commons, always co-existed with market-based models. Elinor Ostrom – which won the Nobel prize in economics in 2009 – analysed several examples of local community-based commons around the world (and considering 1000 years of human history), and discovered some characteristics that all the commons share (Ostrom, 1990 in Rikfin, 2014). We wrote ‘local community-based commons’ in order to differentiate the commons analysed by Ostrom from the current, ICT-based peer-to-peer production model which, as we will see have different characteristics. Local community-based Commons<sup>27</sup> are shown to share similar organizational characteristics, which are:

- A clear definition of group boundaries and membership mechanisms (who can belong to the group and who cannot).
- Clear rules governing the use of common goods (how common resources can be used, for how long, etc.).
- Presence of a self-governing body, which ensures that those affected by the rules can participate in modifying them.
- A system, carried out by community members, for monitoring members’ behaviour.
- Use of graduated sanctions for members who violate the rules.
- Accessible, low-cost instruments/processes for dispute resolution
- External authorities’ recognition of the Commons self-governing bodies and of its rules

As we will see, ICT-based peer-to-peer production experiences share only some of these elements.

### 4.2 Sharing-Based Socio-Technical Solutions

#### 4.2.1 *Community-Based P2P Production*

P2P Value (De Filippi et al. 2014), a European co-funded project ([www.p2pvalue.eu](http://www.p2pvalue.eu)), conducted a statistical analysis of 302 cases of community-based peer-to-peer production (CBPP) experiences, the

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<sup>27</sup> A classic example are Swiss Alpine villages where farmers have private plots for crops but efficiently share a communal grazing.

large majority of which are based, or make use of, ICT tools for their activities. For example, 29.4% of the cases in the sample represent FLOSS projects and 11.9% are wiki communities (De Filippi et al. 2014). Regarding membership rules, the most frequent policy of registration is automatic registration (67.4%), and then moderated registration (21.3%). Interventions without registration (11.3%), the most open approach to membership management, is the least frequently used approach.

Considering now user profiles and the degree of control users have over their profiles, it emerges that 79% have some sort of control over their profile, while 21% have none. Analysing profile control options, the most commonly used is the possibility to make the profile public to all or, if it is restricted, to a subset. This approach is used by 35.1% of observed cases. In contrast, cases where users can only delete their profile represent 26.8% of the sample. Considering now the contributions, 70.9% of cases allow publication without moderation. Even if contributions are in most cases automatic and completely open, membership management shows in the majority of cases (88%) some forms of hierarchy, with different kinds of memberships to which different rights of participation are attached. As stated in the report, ‘Rotations in hierarchies are very uncommon among CBPP communities. Only less than 5% of the cases affirm to have a system for frequent rotation of administrators’ (De Filippi et al. 2014: 31). 64.7% of the CBPP analysed show decision-making systems while 35.3% do not; almost half of the sample (43.1%) have conflict resolution systems in place, while 56.9% do not. Considering now one of the crucial elements of commons management as analysed by Ostrom, i.e. the ability of members to change the governing rules, in 37% of the cases, community members cannot intervene in the definition of formal rules and policies (32). In 34.8% of cases all community members can intervene, while for the remaining 28.3% only a defined group of members can formally intervene in the definition of formal rules and policies.

Considering now sustainability, most of the CBPP experiences produce collaboratively goods and services, but in a way that ‘is not (directly) market oriented, [...] as it is not organized by mercantile exchanges and the outcomes of CBPP are not sold or commodified’ (De Filippi et al. 2014: 184). This is consistent with the voluntary nature of most CBPP examples; nevertheless some of the activities carried out by CBPPs generate costs (technological infrastructure, data management, etc.), which need to be covered. Furthermore, as in the OSS model described in the next section (4.2.1), non-profit activities can co-exist with for-profit activities, at least to a certain extent. The P2P Value survey considered 13 instruments that underpin sustainability. These are:

- Private funding
- Public funds
- Trust
- Trademark
- Paid premium
- Advertising
- Members’ fees
- Monetary donations from members
- Monetary donations from external agents
- Alternative currencies
- Non-monetary donations
- Non-monetary contribution
- Exploitation of external resources

Respondents were asked to consider the relevance of each instrument by attributing a value from 1 to 10 where 1 was ‘not important’ and 10 was ‘most important’. ‘Non-monetary contribution’ is the option that emerged as the most important: 51% of respondents assign a value of 10 to it. Other options, which are seen as relevant by respondents, are: private funding, monetary donations from members, and exploitation of external resources. All these other options, however, have median value considerably lower than the first one, which should be considered as the most used strategy for sustainability in CBPPs.

In other words, CBPPs are based and sustain themselves largely on voluntary, free, non-monetary contributions of their members so that we can say that their sustainability is mainly social and not economic. These examples can also be defined as non-mercantile, non market-based models of production, which produce a value for community members and beyond. At the same time, it is difficult to quantify in monetary terms the value generated, and the communities themselves do not seem to be interested in performing this exercise.

#### 4.2.2 *Wikipedia*

A classic example of CBPP is Wikipedia; a few words on this well-known social platform for knowledge creation and sharing may help illustrate the points above and highlight some further issues that OpenLaws might face. As stated by Wikipedia itself: ‘Wikipedia contains more than 34 million volunteer-authored articles in over 288 languages, and is visited by more than 457 million people every month, making it one of the most popular sites in the world’ (<http://wikimediafoundation.org/wiki/FAQ/en>). For its history and popularity it is one of the most studied case of online collaborative knowledge creation.

Considering the top ten Wikipedia communities, it is possible to say that Wikipedia is at a ‘mature stage’ (Crowston, Jullien and Ortega 2013): the number of contributions is stable and has been such since approximately 2007. From then onwards, in fact, all top-ten language versions registered a stable number of contributions (Ortega 2009), although the difficulties in recruiting new contributors and in retaining the old ones has been seen recently as a risk for its sustainability. The fact that the number of contributors is not growing anymore is not fully explained, yet, as it can be due to the maturity stage of the largest wikipedias, where new contributions are less needed, or it can indicate that the working routines inside the communities become so complex that it is difficult for newcomers to participate and less rewarding, in general, to add contributions (Crowston, Jullien and Ortega 2013).<sup>28</sup> Studying in more detail the recruitment and retention dynamics of Wikipedia and other CBPP communities may be helpful when planning the recruitment strategy of OpenLaws.

Wikipedia is based on the so-called ‘5 pillars’ which are the main governance rules of the community:

1. Wikipedia is an encyclopaedia
2. Wikipedia is written from a neutral point of view
3. Wikipedia is free content that anyone can use, edit and distribute
4. Editors should treat each other with respect and civility
5. Wikipedia has no firm rules<sup>29</sup>

Particularly interesting for OpenLaws is the third principle, which states that no editor owns the content he/she created and, in this way, it associates Wikipedia with the copy-left licences. More specifically, ‘Most of Wikipedia's text and many of its images are co-licensed under the Creative Commons Attribution-ShareAlike 3.0 Unported License (CC-BY-SA) and the GNU Free Documentation License (GFDL) (unversioned, with no invariant sections, front-cover texts, or back-cover texts)’.<sup>30</sup> This ensures that the content created in Wikipedia remains free for the use of others also when used outside Wikipedia.

Related to this principle is the non-market nature of Wikipedia: all content is available free of charge for all, and the only money stream to the community comes from donations or in kind contributions/services. Donations, which in the fiscal year 2012-2013 were equal to more than \$44m USD, are used for human resources (Wikipedia foundation employs 252 people) and technology-related costs (servers, etc.). Wikipedia is operated by the Wikimedia Foundation, which is a tax-

<sup>28</sup> Similarly, to recruit contributors at the earlier stages of development of a CBPP community is difficult as the number of members is too low for the needs of the communities, so that the required effort per person can be very high, in this way reducing their perception of the rewards.

<sup>29</sup> [http://en.wikipedia.org/wiki/Wikipedia:Five\\_pillars](http://en.wikipedia.org/wiki/Wikipedia:Five_pillars)

<sup>30</sup> <http://en.wikipedia.org/wiki/Wikipedia:Copyrights>

exempt non-profit organization based in San Francisco, California. Their annual financial reports are available online, in this way assuring transparency for the community and for donors.

The fifth pillar, the fact that internal rules can be changed over time, will be discussed in the next deliverables when dealing with governance models: the Wikipedia experience on decision-making dynamics can be of great interest in the larger spectrum of online community governance models.

Another topic that may be of relevance for OpenLaws is related to Wikipedia's capability to provide high-quality content on different subjects; for this we refer to Masgari et al. (2014) for an accurate review of the available literature. This topic is clearly crucial for OpenLaws, which will ask citizens and lawyers to share commentaries, cases and references on a wide range of specialist topics. As shown by Tapscott and Williams (2006) this approach is not only used in CBPP, but it has been embraced by various companies worldwide in such a pervasive way to be defined, in fact, as 'Wikinomics'. In the next deliverable it will be necessary to dig deeper in the dynamics of collaborative production of content in order to highlight those governance models (including incentives and recruitment strategies) that will be needed in order to foster the social sustainability to OpenLaws.

#### 4.2.3 *Open Source Toolkits*

The open source toolkit model has been popular for 10-15 years. An example is GStreamer, a toolkit for building streaming applications for Linux, the toolkit is open source and its development and maintenance are contributed to by a large number of participating software companies, for free. Most participating companies, however, develop proprietary (or open source) applications and services using the toolkit and derive revenue from selling or licensing such services.

An open source licence that allows this is the Lesser General Public Licence (LGPL), or 'Lesser-GPL'. GPL is 'viral' meaning that if a single line of code that has been licensed as GPL is included in a large proprietary application many thousands of lines long that whole application will automatically become GPL. Therefore, whoever developed has to release it under the same licence. Intriguingly, this does not mean that the software cannot be sold. It can. But its source code has to be released as well, and under the same GPL licence.

The functions and routines that, together, comprise a toolkit are usually accessed through an Application Programming Interface (API). Thus, one might expect that it should be possible to develop a proprietary application that uses a GPL toolkit. However this is not the case, such an application would become GPL, and therefore could become a legal liability for whoever produced it if its use is not consistent with the licence. The LGPL licence was developed precisely to address this scenario. It is not viral and allows proprietary applications to be built around an open source API as long as the API or toolkit is licensed as LGPL. GStreamer is licensed under LGPL.<sup>31</sup>

Another interesting example is the platform-independent Plone content management system (CMS). This is not a toolkit and it is licensed under GPL.<sup>32</sup> In this case there are a few hundred companies who contribute collaboratively to the development of Plone, worldwide, but then often compete for the same clients. These companies are able to make a profit through the installation and customization of Plone for the specific needs and data requirements of their clients, rather than through the sale of the software itself.

The best licensing model for the OpenLaws community will be discussed and presented in the next report (D2.3.d2). In this report the object was to show that it is possible to mix open source with proprietary software apps that are licensed for profit.

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<sup>31</sup> <http://gstreamer.freedesktop.org/documentation/licensing.html>

<sup>32</sup> <https://plone.org/documentation/faq/plone-license>



#### 4.2.4 *Airbnb and Couchsurfing*

The so-called sharing economy is growing fast. It is said to provide different models of social and economic sustainability which could be of interest to our project. Although the examples that we describe in this and the next sections belong to different economic sectors than OpenLaws's, they can still offer some insight into sustainability and about their relationship to the capitalist market economy. Some of them are commercial, clearly part of the capitalist market approach and produce direct economic benefits for their protagonists. Others do not show any economic/monetary transaction and position themselves somehow outside the capitalist market.

A for-profit and capitalist market-oriented example is Airbnb, the online system through which private citizens can transform their apartments or their spare rooms in a B&B ('Bed and Breakfast') service. All around the world there are approximately 550,000 homes shared through Airbnb, 82% of which are homes in which the host lives. The platform claims to have 11 millions users. 47% of hosts declared that offering their rooms through Airbnb helped them staying in their houses by reducing the costs (source: <https://www.airbnb.com/economic-impact/>). The system is based on user feedback so not only is the host rated by the guests, but also each guest receives feedback from the hosts. In this way, the possibly scary idea of opening your own house to a stranger appears less problematic (even if nobody can verify the correctness and trustworthiness of the reviews provided by guests and hosts). Airbnb, at the same time, is said to have a negative economic impact on the hotel sector, which is much more regulated and has to pay taxes according to national regulations while Airbnb seems to escape all these obligations. A court in New York City is investigating the illegal use of Airbnb by private companies and all other illegalities which may constitute as much as one third of Airbnb exchanges (Valsania 2014). Finally, if Airbnb is a good example of sharing economy, nevertheless it is a protagonist of the financial markets too. The Airbnb Company, in fact, recently had a valuation of \$10 billion and reported revenue of 250 million dollar in 2013 (Strong, 2014; Baker, 2014). Airbnb revenues come from the percentage of the transactions they take both from the guests and from the hosts.

In the same tourism sector a different approach can be demonstrated by Couchsurfing, where people offer their spare rooms, or couches (sofas in the UK), for free to strangers. The same commodity (a room) has a clear monetary value in Airbnb and no monetary value in Couchsurfing. The value in the latter platform is mainly represented by the possibility to meet new people, share experiences, and an expectation of some level of generalized (multilateral) reciprocity. Couchsurfing started as a not-for-profit organization, but is now a B corporation (B stands for benefit and in the US characterizes for-profit Companies that pay attention to investors' benefits and CSR<sup>33</sup> towards the communities in which they operate). The new company raised 22.6 million Euros in 2012 from venture capitalists (Gallagher 2012), who saw a high potentiality in terms of future profitability in a phase in which the platform had no substantial revenues. So, the platform's economic sustainability is based on these investors, as there is no advertisement on the platform and the only – very limited - revenue stream comes from the member verification service which costs 25 US\$ (quote from the Couchsurfing CEO at <http://www.quora.com/How-does-Couchsurfing-make-money>). The value of Couchsurfing for the investors was in their large and active community (Periroth 2011), which were approximately 3 million at that time (and 6 million in 2013). The move from not-for-profit to for-profit raised a lot of concerns in the original community and some observers said that this change ruined Couchsurfing and alienated many of its users (Roundman 2013; Coca 2013; Lapowsky, 2012). Two of the founders stepped down when the investors started pushing for a new business model able to ensure revenues, and this marked the beginning of a radical change of the platform, at least relative to the form it had at the beginning of its story, in 2004. The new CEO is planning to test some options such as more premium services and the introduction of advertisements (Couchsurfing, 2015); in any case it has proven difficult to monetize on a service that does not foresee an exchange of money between users (Burns, 2014).

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<sup>33</sup> Corporate Social Responsibility.

There are two main reasons why we thought these two examples were interesting, even if they concern physical goods rather than intangible goods such as laws and authored text: a) the comparison between the two shows how the same good (a room) can be a market good as well as a non-market good; and b) the couchsurfing experience shows the relevance of the community identity and how ignoring such identity can lead to disaffection and important changes in the community itself that need to be handled with appropriate governance models.

#### 4.2.5 *Crowdfunding and Alternative-to-the-Bank Credit Systems: P2P Lending*

As emerged in the previous section, to base the economic sustainability of a platform on venture capital investment brings in the need to ensure a certain level of revenue and a solid ROI. In many cases, this may seem to contradict the nature of the community, which is the main value of the platform (as in the case of most CBPP initiatives). Venture capital, therefore, risks to become counterproductive.<sup>34</sup> This problem can be overcome – at least to a certain extent – by choosing another instrument of the sharing economy: crowdfunding. A detailed analysis of this phenomenon is out of the scope of this report, but it is important to highlight that it is an emerging and relevant phenomenon. In fact, only considering Kickstarter, one of the most famous platforms of this kind, it is possible to see that the money raised by private citizens and the number of projects financed are relevant. Since its launch, Kickstarter raised 1,534,978,320 pounds and financed 78,751 projects (source: [www.kickstarter.com](http://www.kickstarter.com)).

Through crowdfunding platforms, investors – who are average citizens – offer money and obtain in return the product/service they financed or a more symbolic reward. The platform is made sustainable by the 5% fee it charges each transaction (the payment processor also takes a small percentage on transactions). Kickstarter is only one example of the many crowdfunding platforms, some of which as Goteo follow an open-source, open data, copyleft approach ([www.goteo.org](http://www.goteo.org)).

Another option for funding ideas, also for private citizens, to invest in other citizens and find alternative paths to classical bank loans are P2P lending platforms. They are sustainable due to the percentage they take on each transaction. The investor can decide the level of risk he/she is ready to take on: the higher the risk the higher the ROI he/she will eventually gain. In this sense, the system is not different from a traditional bank, with the counterparties also not coming into direct contact. Still, the investors know what they are financing and obtain higher returns on investment than in a classical bank. On the other hand, borrowers have less difficult entry requirements and lower interest. Of course these new “cooperative-bank-like” experiments are possible in some countries and not in others depending on how lending is regulated, and are more likely to emerge where access to credit is more difficult. The most famous P2P lending platform, ZOPA ‘has managed to originate over 1 billion dollar worth of loans since inception with a default rate of less than 0.5%’ (Athwal 2014). They claim to have lent 749 million pounds since their launch ([www.zopa.com](http://www.zopa.com)).

Both examples, crowdfunding and P2P lending, do not represent a structural way for making an OD platform sustainable and their support in the start-up phase has to be investigated in more detail. The emergence of these kinds of platforms, however, seems to testify to the necessity to search and create new economic models supporting innovation, can be interpreted as a manifestation of the issues affecting traditional institutions in the sector (such as banks and private investment agents), and suggests that deeper transformative processes of the socio-economic environment may be underway.

### 4.3 Existing Solutions for Legal Professionals’ Networking and Collaboration

In the previous sections we described different experiences of commons, peer-to-peer production, and co-creation: none of them focuses on the legal sector. In this section, we present some already-existing

<sup>34</sup> The same process was observable in the case of Flickr, an online community of amateur photographers that, at a certain point, was bought by Yahoo. The change in the proprietary setting and the introduction of significant adjustments in the business and governance models led to a radical change in the community, with the loss of a considerable number of active members.



solutions for legal professionals and we distil the main topics that will be central in the elaboration of the governance and sustainability model of OpenLaws.

As described in D1.1 (Marsden, Eechoud, Wass, Salamanca, & Guadamuz 2014):

There is a community of legal professionals within the legal system, even though such community is currently mainly existing in the ‘real world’ and not so much online. [...] While lawyers use horizontal (all-industry) professional social network LinkedIn in large numbers, the few vertical (lawyer-only) sites – such as DiverseLawyers and FoxWordy – have not reached critical mass.<sup>35</sup> Note that LinkedIn is much more widespread amongst English-speaking audiences. On 1st November 2014, ‘legal’ produced 5,001,668 people results on LinkedIn, the first time over 5,000,000 people were so classified. Attorneys produced 806,133 results, with US total of 682,719. 345,515 people used the word ‘lawyer’ to describe themselves on LinkedIn. There were 148,000 ‘solicitors’, with 88,000 in the UK. ‘Notary’ produced 223,000 results. There were over 12,000 LinkedIn groups using the word ‘legal’ (60% closed professional groups moderated by its owner) and 17,000 using ‘law’ [...] Lawyers are socialising enormously via LinkedIn but not lawyer-only social networking websites (pp.28-29).<sup>36</sup>

One of the topics in the debate on social media for legal professionals, therefore, concerns the trade-off between all-industry generalist social media vs. vertical, profession-specific social media. In the US the first online communities dedicated to lawyers emerged approximately ten years ago: opinions about the success of the initiatives in the field differ, but all recognize the difficulties. There are several platforms dedicated to lawyers or to the legal community in a broader sense, but many that were launched in the last few years closed within a few months.

The next paragraphs describe some of these platforms. The most recent and most recognized ones were selected, with a focus on those offering diverse services. All the examples come from the English-speaking world, mainly from the United States. This reflects the situation of the legal services online where a European social network is not currently available. The aim of this section is to describe the state of the art of online social media, recognize the most important topics emerging, and select those aspects that can positively influence the OpenLaws development, governance, and business models.

#### **Foxwordy** <https://www.foxwordy.com/>

Launched in 2014, this private, US-based social network targets lawyers. Quoting the Foxwordy website: ‘The benefits of Foxwordy’s platform include enhanced collaboration via Q&A, curated content from legal experts, exchanges of referrals, and reputation management’. Users can also store information on the platform’s cloud to be used later, publish job opportunities, and benefit from a built-in service for reputation management.

Foxwordy is by invitation only and can be used anonymously or on-the-record. The choice of allowing users to post questions and answers anonymously is justified, the Foxwordy CEO says, by the need for confidentiality that both lawyers and their clients have (Knapp, 2014). In an interview on Bloomberg Businessweek (Barrett, 2014), the journalist asked why lawyers need anonymity and how they can trust the answers of anonymous peers. The Foxwordy CEO replied that ‘an attorney might desire information about a prospective employer, client, or opposing law firm – but might not want to reveal publicly that he or she needs the intel [...] Lawyers are great at filtering. They can assess the credibility of crowd-sourced information, using what they like and leaving the rest behind’. As mentioned, the social network is by invitation only, and once joined, users must identify themselves as a sole practitioner, a law firm lawyer, or in-house counsel. According to reports, the interactions

<sup>35</sup> There were (in 2012) 770,000 individuals claiming to be lawyers on LinkedIn, making it the fifth largest professional group on the network. See Your American Bar Association (2012, May e-news) LinkedIn: How to grow, nurture your network and obtain results, at <http://www.americanbar.org/newsletter/publications/youraba/201205article01.html>

<sup>36</sup> Barrett Paul M. (2014) A New Social Network Entices Lawyers With Anonymity, Bloomberg Business Week Technology, 6 October at <http://www.businessweek.com/articles/2014-10-06/do-lawyers-need-an-anonymous-social-network-this-startup-thinks-so>

among users are limited to those within the same practice category (Chanen, 2014). No other categories of professionals are allowed and identities are checked and validated.

The Foxwordy revenue stream is based on a subscription model. Users are given a 3-month free trial, after which they pay a membership (starting from \$9.99 per month) which varies according to the services required. In October 2014, the Foxwordy CEO claimed to have signed up 2,800 members for the platform (Barrett, 2014).

#### **Libra Legal network** <http://www.libranetwork.com>

A US-based social network that, at least from the point of view of their funders, wishes to substitute bar associations (Ambrogio 2014).<sup>37</sup> Besides the social network features, the Libra Legal Network offers job listings, vendor discounts, document sharing and other services. Its peculiarity is that of welcoming not only lawyers, but also legal professionals such as legal support staff, recruiters, and legal technology companies, in this way including all the legal business value chains (with the remarkable exclusion of clients). Another characteristic is that of organizing the social network around local communities and providing them with online and offline events. As stated on the home page of the social network, the need for face-to-face events is linked to the necessity to foster trust relationships among members. In the words of the founders: ‘At Libra Network we believe that the only way to really earn trust and comfort in someone's abilities as a professional is the "old school" way of shaking hands and making personal connections’ (<http://www.libranetwork.com/#!/legal-networkhome/mainPage>).

The Libra legal Network builds on a previously existing social network called Esqspot and ‘used’ its 1,600 registered members as an initial user base. The basic membership is for free for lawyers and law students, while all other professionals pay \$20 a month. Lawyers can also choose the advanced membership for \$20 a month and have additional services.

The same company built also social networks for the real estate and medical sectors.

#### **WireLawyer** [www.wirelawyer.com](http://www.wirelawyer.com)

The claim of wireLayer is: ‘wireLawyer is the fastest-growing online community exclusively for lawyers. We are changing how small to mid-sized law firms (SMLs) do business by offering them the opportunity to network, collectively pool their resources, and refer and outsource work to each other. By enabling SMLs, we are creating the biggest virtual law firm in the world.’ (<https://www.wirelawyer.com/about/>).

This US-based platform emerged in 2012 and now claims to have 1.2 million users. Access is free and easy (it is also possible to import LinkedIn profiles) but, as said, it is only for lawyers and identity is verified before access.

It is mainly a dedicated LinkedIn space but with a strong accent on outsourcing and insourcing jobs, and follows a revenue-sharing model. Users are invited to post work opportunities, called referrals, and answer to requests coming from other colleagues. The social network mainly targets small and medium-sized firms with the idea of fostering collaboration by splitting or exchanging revenues. Users can also upload documents and if they upload documents to wireLawyer database they can sell them to other users; the platform will take 50% of the revenues. Besides economic transactions, wireLawyer allows users to get points: the more a user is active on the platform, the more points he/she gets. Having a high number of points assures top-ranking in the internal search engine so that if a user is – as an example - searching for a lawyer specialised in labour issues, the first in the list will be the user with the highest number of points.

By analysing the latest referrals, it seems that activities stopped in August 2014; the last post in the related blog is six months old too. Unfortunately, as per the majority of the platform here described,

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<sup>37</sup> Bar associations are professional organisations for lawyers.

access is allowed to lawyers or legal professionals only and identity is verified before getting access. For this reason it was not possible to conduct a deeper ethnography and better understand the state of development and the vitality of this and other platforms.

### **Legal OnRamp** [www.legalonrampo.com](http://www.legalonrampo.com)

This website is developed, hosted and sponsored by the American OnRamp Systems Inc., an enterprise which provides legal and technological services to the legal departments of medium and large corporations. The website is more an online journal, an aggregator of blog-like content, and a curated Q&A than a social network: content is provided by OnRamp Systems Inc. and by registered users. However, the social network basic features such as user profile, groups and reputation mechanism seem present as well. The website offers also training opportunities thanks to partnerships with law schools and a large bank. As stated in the log-in page: 'Membership in Legal OnRamp is primarily for in house lawyers. Firm lawyers may be invited to participate based on the fit of their practice, their authoring of content, and their ability to expand the network. For firm non-lawyers (e.g., Marketing, IT, Knowledge Management or other), only the senior-most person in the organization should apply. For solution providers, consultants and others not affiliated with a legal department or law firm, membership will be considered based on your ability to contribute to the value of the network' (<https://www.legalonramp.com/index.php/contact-us#account>). At the present stage it is difficult to understand how many users are on Legal OnRamp and what traffic they generate. In 2012 Legal OnRamp declared to have 12,000 members from over 40 countries, roughly 50% of whom representing in-house counsel (Chester & Del Gobbo, 2012).

### **LawLink** [www.lawlink.com](http://www.lawlink.com)

Compared to other platforms, LawLink seems to show a more vibrant community (the latest posts are very recent); on the platform citizens and colleagues can find attorneys, legal experts and professionals providing support services for legal firms. Authenticity of an identity is verified prior to access, but in order to consult the list of LawLink members one need not be a registered user. This suggests that the website is also, or mainly, a shop window for its members. Members can be searched looking for their specialization and/or for their locations. Most of the users are from the US, Canada and Australia, but some UK members are also present. Members of the platform can provide information about their specialization, connect with colleagues, show the reviews made by others and upload documents. The platform also gives stars to most active members offering in this way a reputation mechanism.

### **Martindale Connected** [www.martindale.com/](http://www.martindale.com/)

Similarly to LawLink, Martindale Connected allows non-registered users to find a lawyer among the platform users. The search engine allows advanced search so that it is possible to search a lawyer by location, specialization or both and the community members represent not only US and Canada but also other countries (Ambrogi, 2010). The platform offers to members other services such as: marketing services, job posts, training opportunities, access to groups and discussions. On Martindale Connected Legal Library users can find legal articles, court documents, white papers and presentations, including user-generated legal documents. This adds to the Lexis database which contains US statutes, laws, case opinions dating from the 1770s to the present, as well as publicly available unpublished case opinions from 1980 on; legal documents are also present for other states such as France, Australia, Canada, South Africa and Hong Kong (Chester & Del Gobbo, 2012).

Martindale Connected is owned by LexisNexis, which is owned by the Anglo-Dutch publishing company Reed Elsevier. Services are provided following a subscription model and the community seems vital and large. As an example, by searching for litigation experts in Chicago the platform returns 36,194 lawyers, while looking for an expert in injury-related cases 84,216 lawyers result in New York City only. From the data publicly available, this seems to be the largest community of lawyers available at the present stage in the English-speaking world. Although data about the current number of users and traffic is not available, in 2012 the company claimed to host over 30 terabytes of content (Chester & Del Gobbo, 2012).

**DeferoLaw** [www.deferolaw.com](http://www.deferolaw.com)

Created by an advertisement expert for the legal world, DeferoLaw offers visibility to its members which can make themselves known by the internal community of legal experts and to the general public in two ways: by updating their status and by developing a personal blog. At the time of writing the platform has 170 users, mainly based in the UK, so only a rather limited community is observable but they appear quite interactive and updates are on a regular, daily base. The main revenue channels seem related to job posts. In fact, users are charged 50 pounds for a one-month job post. The platform claims that job offers 'will be seen by a community of 1,600+ lawyers, support staff and legal marketing professionals. Tweeted to 4,000+ followers on Twitter. And be seen by 1,500+ connections on LinkedIn'. Therefore it is possible to say that the platform takes care of advertising the posts on other social networks and online channels, making this marketing service one of the main killer applications of the platform.

**RocketLawyer** [www.rocketlawyer.com/](http://www.rocketlawyer.com/)

Via RocketLawyers a user, which can be a person or a company, can develop legal documents (job contracts, partner agreements, divorce protocols, etc.), get help via Q&A, have a dedicated expert helping companies stay in compliance, and receive all the legal support needed for running their businesses.

These services are free for one week and then the user is charged 39.95 dollars per month in the US and 25 Pounds per month in the UK. In fact the platform exists in these two countries, only.

This platform differs from the previous ones as it is not a social network for lawyers and legal professionals, but a front-end through which users can get in contacts with lawyers and have access to legal formats that they can use independently from legal experts.

Rocket Lawyers was funded in the US, in 2008 and in 2011 received investments (\$18.5 million) from a group of investors, which included Google Ventures. In the same year Rocket Lawyer attracted 7 million from another venture capital group, the former chief executive of LinkedIn became its president, and one of the top lawyers of Google (David Drummond) became one of the Rocket Lawyers' directors (Fisher, 2011).

Rocket Lawyers finds its killer application in a series of free, interactive legal templates that users can adapt to their needs. Moreover users can draft, save and share legal documents using the platform as a sort of Google doc service, allowing in this way collaborative writing. By paying a subscription fee, users can then ask the opinions of the Rocket Lawyers affiliated attorneys for validating their legal documents or have other kinds of consultations. As mentioned on dedicated blogs, it is not clear who employs the lawyer Rocket Lawyer refers the users to so that the quality of their opinions is not easy to evaluate a priori and conflicts of interest may potentially emerge (Blum, 2011). In the US there are many other similar website where users can find various legal forms for their use, such as, among others: US legal, Law Depot, etc. Its main competitor seems to be Legal Zoom which also attracted the attention of venture capitalists and in 2011 was claiming to have 1 million users (Fisher, 2011) (Farr, 2012).

At the time of writing the platform claims to have created over 2 million documents, to have answered to more than 30,000 questions and to have provided service to more than 900,000 businesses.

**ClearView Social** [www.clearviewsocial.com](http://www.clearviewsocial.com)

This platform differs from the others as it mainly provides a service for medium and big law companies; it is not a social network for law professionals, but a tool that allows to exploit the social networks of attorneys and, more specifically, their presence on social networks. In this sense it is a marketing tool that allows lawyers to share content across social networks such as LinkedIn and Twitter in a simplified way. A marketing professional – typically the marketing unit of the law firm – creates a list of contents and sends it as an email to each attorney at the firm. Recipients can, even without opening the content provided by the marketing unit, select in one click the content he/she

would like to share through his/her blog or social media profile. In this way the law firm can spread its content to the contacts of all its employees, multiplying its visibility and, potentially, increasing the number of potential clients.

ClearView Social is a new platform, funded in 2014 by Adrian Dayton, a social media consultant in the legal industry and former practicing attorney. ClearView Social was developed and economically supported by an incubator in the Buffalo areas (US) and received \$400,000 in seed funding. (Doherty, 2014).

All these examples are facing the same challenge, to reach a critical mass of users, and this is also the main challenge for OpenLaws. As mentioned earlier, in recent years many social networks dedicated to law-related professionals have emerged and failed; an important example is the flop of LegallyMinded, a social network created by the American bar association, which closed in 2011 (Ambrogio, 2011). One of the possible issues behind these failures is that social networks for lawyers are not sufficiently ‘social’, in the sense that they separate the professional social relationships of users from the rest of their relationships (Elefant, 2014). All these solutions focus on job-specific interactions, leaving out the personal lives of users and excluding from the network non-law-related social ties. This may explain, at least partially, the relative success of LinkedIn, which is well used by lawyers and law-related professionals that can find their colleagues, but also potential clients. LinkedIn appears better able to exploit the network effect of social networks than vertical solutions. At the same time, it is also true that legal professionals need specific services that LinkedIn cannot offer. Considering the platforms described above, it is possible to see that the services provided go far behind the services provided by LinkedIn and other generalist social networks. We provide below a simplified list of the services available on the different platforms:

- Social networking:
  - User profile
  - Public and private groups
  - Reputation mechanisms
  - Q&A within the community of legal professionals
  - Access to curated news and blogs
  - Access to user-generated news and blogs
- Career-related services:
  - Job positions posting
  - Online and face-to-face events
  - Training opportunities
- Documents-related services:
  - Document repository
  - Collaborative document drafting
  - Access to legal forms to be reused
- Market-place kind of services:
  - Referrals (outsourcing working opportunities)
  - Selling documents
  - Free or paid Q&A with the general public
  - Legal consultancies for the general public (online and by phone)
- Marketing services:
  - Window-shopping services for legal professionals and related firms
  - Tools for sharing contents on social media
  - Social media marketing services

OpenLaws has already planned to offer some of these services, including access to laws, commentaries and related documents, which only one platform among those examined offers. It may be worth adding more services, and it may be helpful to consider the already-existing solutions – if not within the project lifetime of OpenLaws, then for its future development and for the sustainability of the platform after the end of the project.

Another possible cause of the difficulties met by many platforms in reaching a critical mass of users may be related to the specific attitudes of the law community. Resistance to ICT, in general, and to collaborate and share content for free, more particularly, seem to be higher in the legal community than in other communities (Elefant, 2014). This cultural aspect appears to be at least partially true considering what happened to the start-up AttorneyFee. The start-up was about to launch a search engine allowing users to compare the rates of thousands of lawyers. The start-up received three lawsuits even before the launch as lawyers and their organization claimed it was not fair to disclose their fees. In the start-up founder's words: 'Pissing off every lawyer in America isn't a good way to start any company [...] But let me be clear. This is a \$20 billion industry that tech hasn't touched yet. If you can increase access to justice and bring down costs, you are helping real Americans with real problems. It's not about posting pictures to your friends' news feeds; this is the difference between getting kicked out of your home or not' (Farr, 2012).

The above-mentioned platforms are trying to change the situation by selecting different governance-related instruments. Simplifying in binary terms the options emerging from our overview, it is possible to say that some communities are open, while others are following an 'on invitation only' policy and almost all of them verify the identity of potential members. This is a first important difference between law-sector social networks and generalist ones.

Another opposition is between public and private: members' profiles and the content they create on the platform can be public or private. They are public when the platform wishes to attract clients and accentuate the marketplace-nature of its services, but they are private when the accent is on peer-to-peer collaboration and exchange. One platform also allows users to share their content and interact in an anonymous way; not only in private, but also hiding the users' identities.

Another important choice that these platforms have to make is related to members: many are restricted to lawyers only, while others are open to other legal professions. This aspect is important also when considering the services to be provided because different users may need different services and may require different governance strategies. Finally, there are platforms where the majority of the content is user-generated and others where curated contents are predominant, in this way bypassing the difficulties in motivating users to share content for free on the platform.

Concluding: invitation-based access vs open access; anonymous interactions vs 'on the record' interactions; private content vs public content; lawyers-only vs legal professionals; and curated content vs user-generated content appear to be the main topics emerging from the analysis and that deserve to be further explored in the light of OpenLaws's future development.

## 5 A POSSIBLE SOCIO-ECONOMIC FRAMEWORK FOR OPENLAWS

### 5.1 Introduction

The need for a socio-economic framework for OpenLaws arises from the experience of open source communities. It is not enough merely to rely on voluntary contributions, some economic incentive is needed.<sup>38</sup> This could take the form of improvements in the professional reputations of the contributors, which may lead to better jobs for them, or more reliable software around which software consultancy services could be developed. Similarly, the sustainability of several of the examples discussed in Chapters 2 and 4 is based on their usefulness, i.e. the utility that their members derive merely from their use and that often translates in professional or financial advantage.

An interesting critique of OD initiatives is provided by Rob Kitchin (2013), who summarizes some of the financial, technical, political, and social challenges that are sometimes overlooked in the general enthusiasm associated with the need to make OD available. The influence of large private-sector players and the role they have played in pushing governments to make OD accessible is interesting from the point of view of the balance between the democratic and the commercial dimensions of OD that we have touched on in parts of this report.

The case of OpenLaws adds another level of complexity due to the presence of several categories of stakeholders that the project's outputs need to support and cater to, bringing together several of the examples discussed at different points in this report. In addition to the lawyer communities discussed in Chapter 4 and private sector companies, OpenLaws also needs to cater to citizens' rights to access legal open data (LOD) and, if not support directly, at least be compatible with public sector players like public administrations (PAs) who are responsible for making LOD accessible. Therefore, in addition to individual utility the OpenLaws community also has greater democratic participation as a goal, which points to the need for a balance between social and economic criteria of sustainability.

Having defined the problem this far, what remains is to decide on the possible interpretation of the role of the PA stakeholders, based on different interpretations of what are ultimately principles of governance:

- 1- *Public sector sustainability is exogenous to the OpenLaws sustainability framework.* Access to legislation and case history data, or PSI more generally, is a fundamental democratic right of citizens in democratic societies. Therefore, PAs should make LOD and PSI available and should fund any technical or institutional costs from their own budgets, allocated from tax receipts through the usual policy and political processes.
- 2- *Public sector sustainability is at least partly endogenous to the OpenLaws sustainability framework.* In recognition of the increasing difficulty of the public sector to finance its policies, the provision of access to LOD and PSI by PAs should be funded at least in part by the OpenLaws sustainability framework.

The first case is appealing from the point of view of the accountability of elected officials for what the electorate regards as democratic rights of the citizens. On the strength of the PSI Directive, the electorate can pressure PAs to comply and make PSI accessible for free. In this scenario the financing of LOD/PSI databases by PAs can only be effected with tax receipts, thereby displacing other policy priorities. This first scenario is discussed first.

The second case can be justified on the grounds that the prevailing logic of privatization has given central governments a way to justify ever-shrinking budgets. Insofar as smaller budgets lead to more

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<sup>38</sup> Wikipedia is a the natural counter-example that comes to mind. However, Wikipedia is very broad. Where collaborative knowledge creation is limited to a narrow sector or set of sectors it is more difficult to build a community without some kind of direct or indirect economic incentive.



difficult choices between spending priorities, this puts the fundamental democratic right to access OD and PSI in jeopardy. Thus, a credit buffer mechanism could help achieve a similar level of sustainability of LOD provision across Europe, irrespective of the policy priorities of a given PA. This second scenario is discussed second. Interestingly, the second scenario is compatible with the first and can, in fact, be regarded as complementary.

## 5.2 A Framework Based on Open Data as Public Good

In addition to the many changes that are at present taking place in the so-called knowledge economy, it is possible to observe the emergence of new rights linked to ICTs. For example, access to the Internet is increasingly considered as a right or as a condition *sine qua non* for social and political participation. For this reason many PAs around the world are offering free WiFi in public spaces, by so doing jeopardizing the business models of private Internet providers (Rifkin 2014). Also in this case new business models can emerge as in some cases the PAs use public procurement schemes for offering free WiFi service, in this way paying the Internet providers and/or allowing them to advertise their services on the free WiFi user interface.

Free access to OD can also be seen as a new right of citizens and, if this is the case, OD can be interpreted as a public good (or a Commons). Several international organizations – among which the World Wide Web Foundation – are working in this direction and some states have already included the right to data and the right to open data in their legislation (Web Foundation 2014). This opens up a scenario that is close to the open source paradigm, but which is still inside the domain of the capitalist market. If we accept this assumption (access to OD as a citizen right), then the sustainability of PAs' efforts related to OD provision can come from general tax receipts or, alternatively, can be linked to an ad hoc taxation policy. If the latter option is chosen, then ad hoc taxation can be paid by those enterprises that generate an income from the development and the provision of services based on the OD provided for free by the PAs.

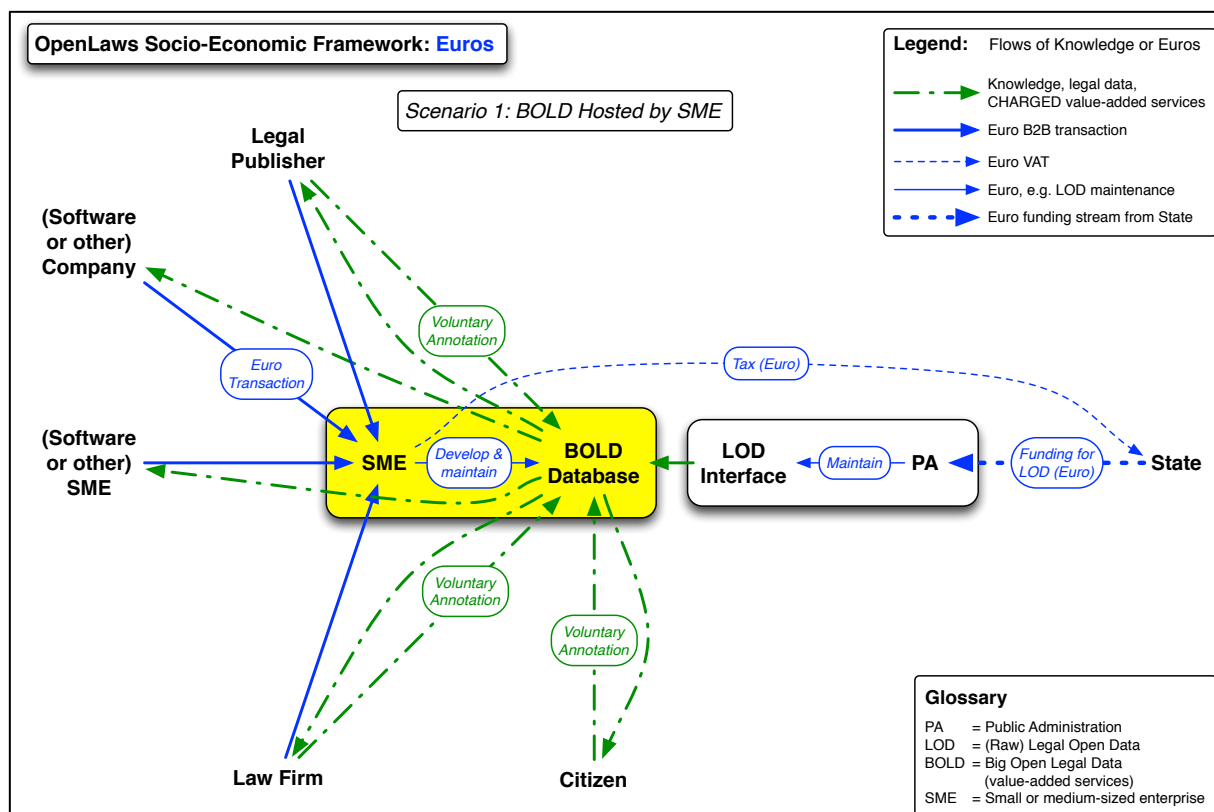


Figure 4: Scenario 1 for the socio-economic sustainability of LOD and BOLD databases



In this scenario, the business model for enterprises will be similar to those described in Section 4.2.1 for Open Source business models. The enterprises will access OD for free in the same manner as regular citizens do, and will charge their costumers for the value added by the services developed on top of OD. The income generated will be subject to a specific taxation.

Another option, shown in Figure 4, could be to offer LOD for free to private citizens, but charge enterprises. In this binary model citizens could have access only to a limited amount of data and possibly made available only online, without the possibility to download it, while enterprises would not only be able to access all the data of interest to them, but – ideally – some support for their export, use, and maintenance. In this freemium model the PA would become not only a provider of data, but also a provider of services for enterprises. Of course, this solution implies the possibility for PAs to distinguish and regulate the access of different users and an interest on the PAs' part in developing, in-house, services for enterprises. For this reason, in many countries this scenario does not seem realistic.

### 5.3 A Framework Based on Legal Credits

The second approach is motivated by a desire to find a constructive balance between the democratic legitimacy of public institutions, whose budgets are being eroded by privatization, and the use of OD and PSI for private sector (technical) innovation and (social) entrepreneurship initiatives.

We need to develop ways in which public sector investment in LOD, PSI, and BOLD can generate an ROI that is more than 'social value' because, rightly or wrongly, economic sustainability has tended to be only understood in terms of money. Here, then, is where a redefinition of 'money' along the lines discussed in Chapter 3 can lead to a constructive compromise that caters to both sides of the socio-economic system or community. A form of money that supports a non-capitalist market may be a workable solution that supports equally the objectives of the public and private sectors and is compatible with both.

The Sardex B2B mutual credit system appears to satisfy the sociological definition of money and to realize a well-functioning non-capitalist market at a scale that is macroeconomically relevant. Furthermore, the total fiscal transparency that it requires of its members reinforces the state's role in the balance between public and private money creation and this, in turn, affords it greater legitimacy and a constructive complementary role to the Euro (unlike most other community currency examples which are too small and/or have difficulty exacting taxes).

However, it is difficult to imagine how a multi-sector currency such as Sardex can underpin a sector-specific community such as that fostered by OpenLaws. It may be possible to overcome this weakness by allowing the use of an OpenLaws currency (henceforth Legal Credits, or LCs) beyond the legal domain, but restricting its use to the service sector. What follows is an initial sketch which, if found to be of interest, would need to be analysed further and tested in detail. In this section we merely wish to show that this scenario would be compatible with everything we have discussed in this report, and that the experience of similar credit systems seems to provide a plausible starting point for OpenLaws LCs.

In this scenario there are four categories of stakeholders: private businesses, citizens, PAs, and credit-clearing legal entities (CCLEs). A fifth category of non-profit, third sector companies, charities, and social enterprises is also important, but in this scenario we assume that in most cases this category will be identified with the CCLEs. As shown in Figures 5-8, the private businesses can be further subdivided into software companies (especially but not exclusively SMEs), legal publishers, law firms, and other service-sector providers. In these figures and in the present discussion we use Euros for the sake of simplicity, but what we say about Euros could apply equally to GBP or any other national currency. Another general point about these figures is that the nodes of the network on the right (State, PA, LOD/BOLD Database, Citizen) are public sector actors, whereas all the other nodes in these networks belong to the private or third sectors.

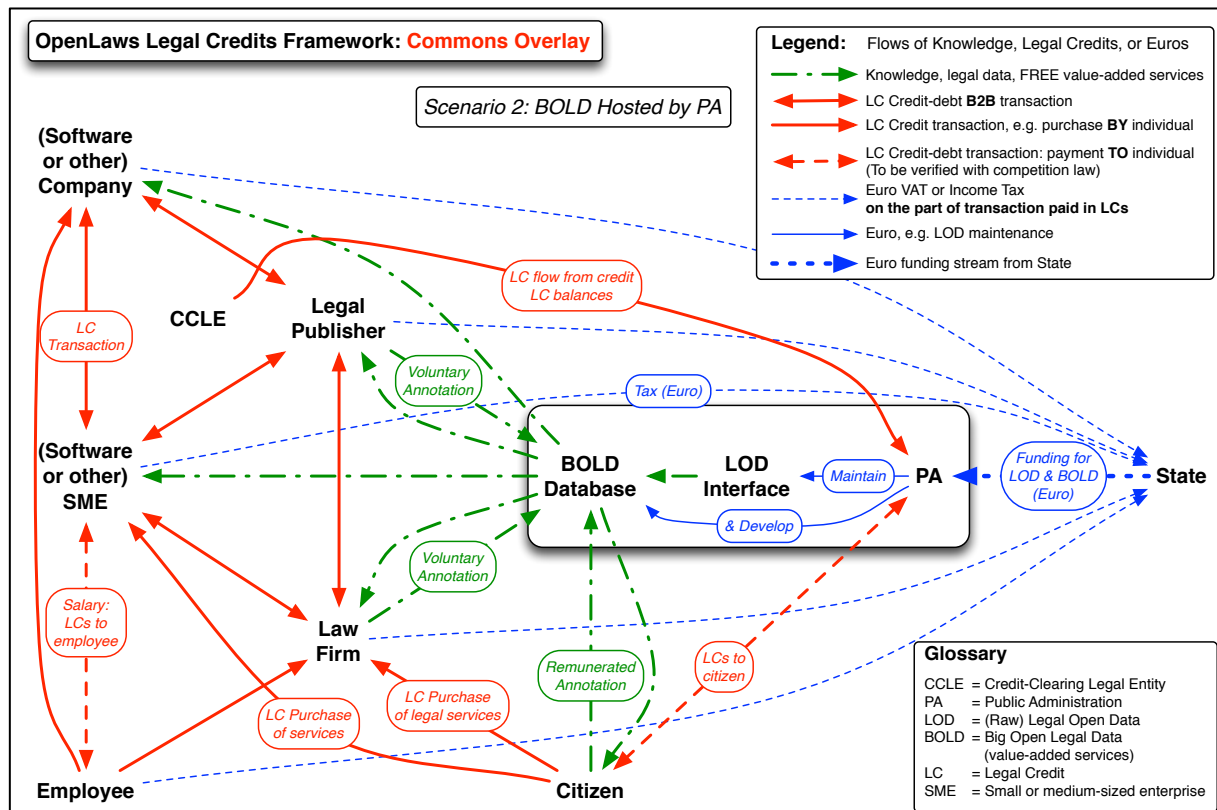


Figure 5: Scenario 2 for the sustainability of LOD and BOLD databases, Legal Credits view

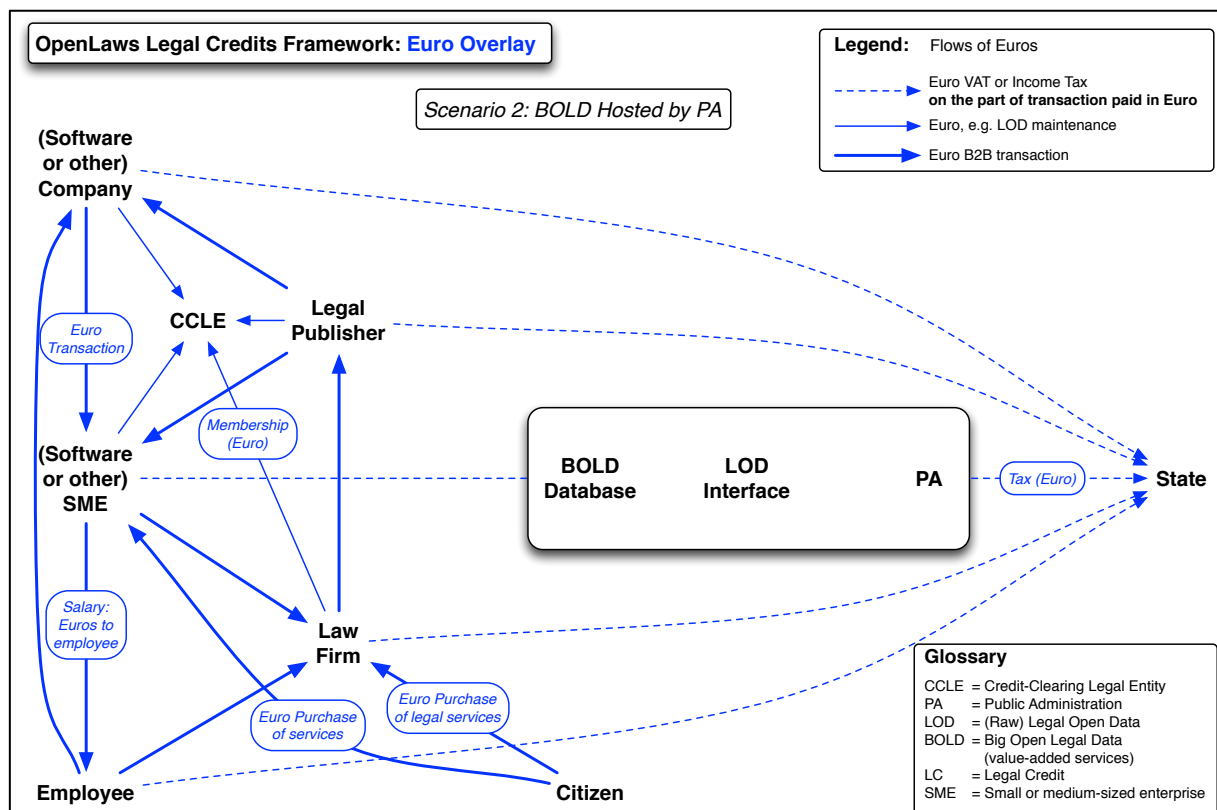


Figure 6: Scenario 2 for the sustainability of LOD and BOLD databases, Euro view

Figures 5 and 6 refer to Scenario 2, where LCs are used, the BOLD Database is hosted by the PA, and citizens are remunerated in LCs by the PA for the annotations they contribute to the BOLD Database. Figures 7 and 8, on the other hand, refer to Scenario 3, where the BOLD Database is hosted by a non-profit CCLE and citizens are not remunerated. In all the figures labels are provided for each kind of arrow and each arrow is further defined in the respective Legends. We now explain each actor in these scenarios and the flows and interactions between different pairs of actors that we envisage.

It is important to realize that each pair of corresponding red and blue arrows in Figures 5 and 6 refers to the *same* transaction, a (negotiable) part of which is paid in LCs and the remainder in Euros.

The **CCLE** is a crucial component because it needs to embody the balance between the capitalist economy and the public commons. For example, it could be a private non-profit company, or a public company with a limited profit-making mandate, like a cooperative bank or building society, and constitutionally unable to invest in financial instruments. Rather than charging a transaction fee, like WIR, we think it would be better to follow the Sardex model and charge a yearly membership fee that is scaled by the turnover of the individual member company. This revenue flow, in Euro, is shown in Figure 6 as a thin, solid arrow from the companies to the CCLE. This income stream would be used to cover the fixed costs of the CCLE. Whether or not the CCLE pays tax depends on its legal entity type, so in Figure 6 no tax arrow connecting it to the State is shown because we are assuming a non-profit company.

As in Sardex and WIR, the centre of gravity of the system would be **private businesses** since they would transact the largest volume of trade. Following appropriate vetting and provision of collateral, businesses whose application to join the LC Circuit was successful would be able to obtain a credit line, i.e. to accrue a negative balance. This is shown in Figure 5 by thick, red, bi-directional arrows, which emphasize that through the transaction one party accrues a positive LC amount that corresponds to the price of the service (the seller) while the other party accrues a negative equal amount (the buyer). This amount is added or subtracted to the respective balances of the two actors at the time the transaction is made. In Sardex companies have 1 year to recover from a persistent negative balance, after which, if no market activity is shown, they need to repay the negative balance in Euro.

For every transaction the seller would need to pay VAT in Euro, shown in both figures as a thin, blue, dotted arrow from the various companies to the **State**. It is important to realize that for a given transaction some negotiable percentage is paid in Euro and the rest in LCs. Thus, the dotted tax arrows in Figure 5 refer to the VAT amount, in Euro, based on the LC amount. The same kind of arrow, in Figure 6, refers to the VAT amount based on the Euro part of the transaction. Clearly every state will decide its own fiscal policy, but the suggestion here is that the tax accrued from LCs should be allocated by the State as funding to support the PA's costs in the development and maintenance of the **LOD** and **BOLD databases**. The tax flow shown in Figure 6, on the other hand will simply contribute to the State's tax receipts and will be used for other purposes.

Since every transaction is mediated centrally by the CCLE, total tax transparency and compliance can be ensured. Secondly, as discussed in Chapter 3, following the Sardex example it appears that payment of tax in Euro achieves both a legitimization of the credit currency, which is used as a unit of account on par with the Euro, and integrates the complementary currency and the economy it supports with national fiscal policy. Thirdly, by making free-riding impossible this transparent tax mechanism could be argued to reinforce the institutions of accountability and mutual responsibility between the participants. In other words, this model carries significant governance implications that will be explored more fully in the next report. It seems that in Sardex and WIR this feature has strengthened the level of social cohesion that we could describe loosely as a form of "cultural Commons" or "shared social capital", or simply mutual trust.

As in Sardex's B2E policy, businesses would be able to pay part of the salary of their employees in LCs, subject to the agreement of the latter. This is shown by a thick, dotted, red, bi-directional arrow from **SME** to **Employee**. The reason this arrow is dotted is that, even though this transaction follows

the same mechanism of subtracting from the company's LC balance the amount paid to the Employee, unlike the case of B2B transactions the credits can only flow in one direction, from Company to Employee. Since LCs, like Sardex or WIR, satisfy the definition of money (Ingham 2004), the LC part of employees' income is taxable at the same rate as the Euro part of their income. This is shown by a thin, blue, dotted arrow from Employee to State.

Since the tax revenue associated with the LC income is earmarked for the PA for the support and maintenance of the BOLD Database, it may appear that this tax revenue flow decreases the State's tax receipts that can be used for other purposes. However, this is not the case, as evidenced by the experience of WIR and Sardex. The introduction of a mutual credit system *increases* the economic activity of the economy to which the participating members belong. This is not only through import substitution (see Chapter 3), but also because many trades that involve both credits and national currency could not have taken place without the credits acting (by design) as a credit buffer. Therefore, mutual credit systems increase GDP, but without exacerbating the negative effects of capitalist growth highlighted by 'Beyond GDP' critique.

**Citizens** would be able to accrue a positive balance of LCs if they are employees of member companies and/or if they contribute to the BOLD databases with annotation or other knowledge-intensive services. In the latter case they would be paid in LCs by the PA curating the set of BOLD or PSI that was annotated by the citizen in question. It is possible – indeed likely – that such a citizen is also a lawyer in a **Law Firm**. This would not be an obstacle, but such a person could only accrue LCs as a citizen, not on behalf of his/her company. This idea may not be allowed by competition law and requires further analysis. In other words, private sector stakeholders such as **Legal Publishers** may regard the remunerated annotation by citizen and the subsequent provision of free services by the State as unfair competition. Assuming for the moment that this feature is allowed, PAs would have a central role in the sustainability and legitimization of LCs through their authority to create them in payment to citizen contributors. This is shown by a thick, dotted, red, bi-directional arrow from PA to Citizen. As in the case of SME to Employee, the credits can only flow in one direction, from PA to Citizen.

As discussed in Chapter 3, according to Mellor (2010) the ability of the PA to create LCs is a crucially important step in giving some of the power to create money back to the public sector, because the democratic accountability of the public sector implies that at least part of the money creation power would come back under democratic control.<sup>39</sup> Hence, such a seemingly minor aspect of the overall network (given the likely smaller LC flow involved relative to the volume of B2B transactions) would in fact carry a powerful symbolism for an increased sense of empowerment of the democratic institutions "guarding" and maintaining the BOLD database vis-à-vis the profit drive of the private sector actors.<sup>40</sup>

The tax flows are crucially important to the sustainability of the whole system. PAs will need to front two kinds of costs: maintenance costs of the BOLD databases and clearing of their negative balances accrued when paying citizen contributors. The former would be funded from the portion of the tax revenue coming from the LC part of B2B transactions and employees' income. Following Amato and Fantacci's suggestion (2012b), the latter would come from a small fee imposed on positive LC balances carried by private sector members. This is the same concept designed by Keynes for the EPU (see Chapter 3). In today's context, this fee can also be seen as a form of Corporate Social Responsibility (CSR) contribution, which as Amato and Fantacci suggest could be used also to support non-profit social enterprises and charities. CSR can of course be relied upon also without a credit system, or in addition to the LC system discussed here.

<sup>39</sup> Although the credit-debt bi-directional arrow between PA and Citizen may suggest that this authority still resides only with the CCLE, in fact the negative balance accrued by the PA does not imply a requirement for the PA to sell services to clear it, because a flow of LCs from the CCLE to the PA is guaranteed, as explained below.

<sup>40</sup> As explained by Douthwaite (1999: 51), there is a potential risk with governments increasing the money supply by spending it into circulation, because of the seignorage they could earn and, also, because an expanding money supply means expanding tax receipts. So the role of PAs in money creation would need to be calibrated/regulated carefully.

Whereas negative balances would not be charged interest, the small fee charged to companies with a positive balance would stimulate the spending of LCs, stimulating the “OpenLaws economy”. This is shown In Figure 5 as a thick, red, solid arrow from CCLE to PA. This arrow is uni-directional because the CCLE cannot go negative with respect to this flow: only the funds generated by fees on companies’ positive balances could be transferred to the PA. Since the PA is able to go negative, on the other hand, this restriction does not imply a delay of the annotation activity relative to the B2B activity.

There is another instance of thick, red, solid double arrow that is not shown in the figure, and that is between the PA and one or more private sector (software) service providers, for example for the maintenance of the BOLD database. By the same token, a blue Euro arrow could also be drawn from PA to the same category of providers. Both are possible, but in this figure we have assumed that the greater sustainability of the PA enabled by this framework will enable it to hire its own internal technical department to maintain the database.

As Law Firms, Legal Publishers also have an incentive to annotate the BOLD Database according to the Open Source model, i.e. without remuneration. They are expected to make a profit through the greater overall activity around LOD stimulated by the overall system, for example by selling printed and bound versions of the annotated laws and case histories according to a standard or freemium model.

Figures 7 and 8 show a similar scenario, where now BOLD Database is hosted by CCLE, which is assumed to be a non-profit company. Also, in this scenario the citizens are not remunerated.

### 5.1 Critical Discussion

For both scenarios, although the same LCs would be valid nationally, i.e. Europe-wide, the number of CCLEs should probably equal the number of PAs, and membership circuits would need to reflect the jurisdiction of the PAs, thereby reflecting the underlying purpose of the system as a whole, which is to support the BOLD Databases housed by the PAs. Cross-jurisdiction trades could be handled in a manner similar to the interactions between the Sardex-like systems that are being set up in different Italian regions.

An OpenLaws mutual credit system could be based on a mixture of credits and national currency for any size transaction, the only exception being the remuneration of citizens for the annotation of BOLD records, which could happen only in LCs. As mentioned above, CSR contributions could complement the sustainability model discussed here.

We should acknowledge that another obstacle to the adoption to either Scenario 2 or 3 is the well-known reluctance of lawyers to adopt new technologies, as eloquently discussed by Susskind (1998, 2010). Adopting a new form of *money*, on top of that, seems even more challenging – although the participation of citizens and other legal and service sector stakeholders might tip the balance in favour of this radical innovation.

There would be a 1-1 correspondence between legal credits and the national currency of the seller (Euro, GBP, CHF). This would enable the use of LCs in any one currency system. However, it is not clear whether cross-currency trades would be possible without harming the principle of non-speculation without which the LCs could risk becoming another commodity. This aspect of the system requires further study. No matter what solution may be found, in order to retain the social and democratic benefits of a non-capitalist market it is of paramount importance that LCs not be exchangeable with any of the regular currencies.

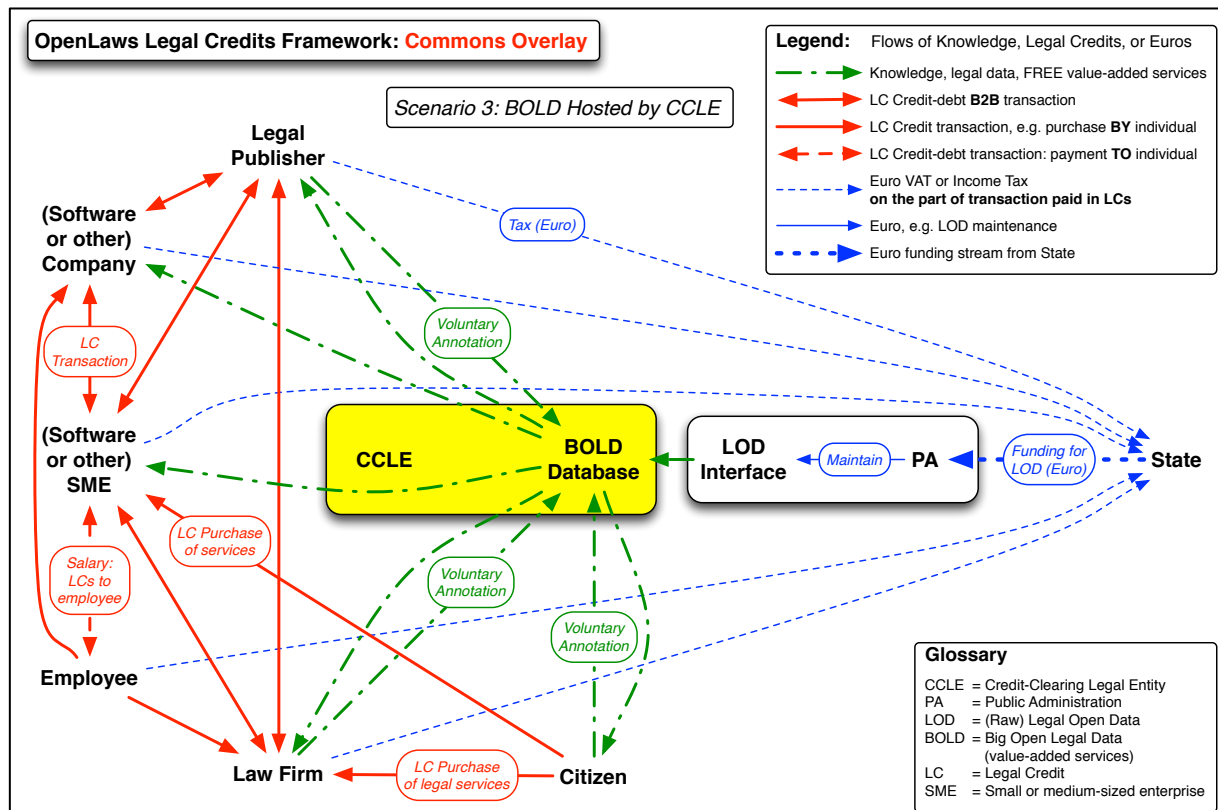


Figure 7: Scenario 3 for the sustainability of LOD and BOLD databases, Legal Credits view

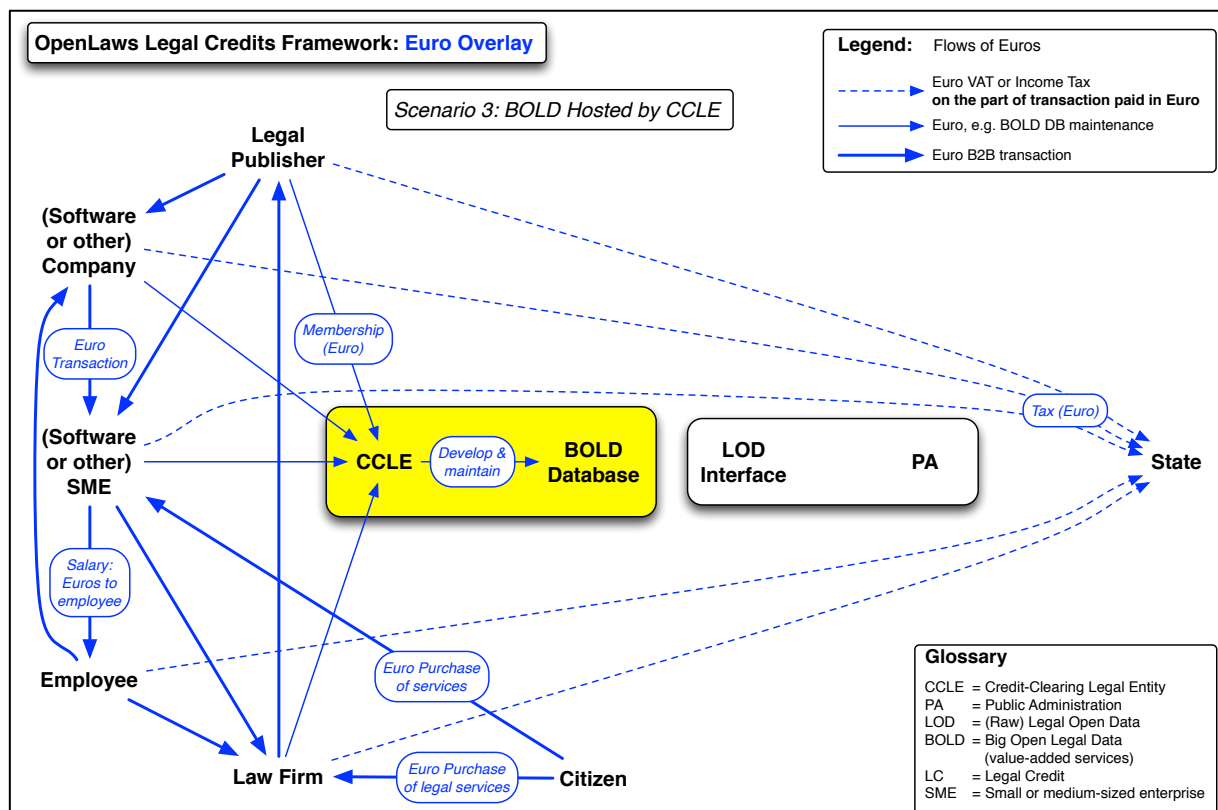


Figure 8: Scenario 3 for the sustainability of LOD and BOLD databases, Euro view

Another aspect that seems challenging is how to implement fiscal policy not only within the same currency area, like the Euro, but also across different national boundaries and jurisdictions. Clearly, at the least the same credit-based system would need to be adopted in both countries where the transaction partners are situated. In any case, it would be preferable for Scenarios 2 or 3 to be introduced gradually and side-by-side with the first scenario, allowing each jurisdiction to adopt some form of a mutual LC system to the extent that they feel comfortable with. As a consequence, different parts of Europe could end up with somewhat different versions of this framework. It would then be the responsibility of OpenLaws to ensure that a minimum level of interoperability is maintained, similarly to the requirements for harmonization of the data sets in the various BOLD databases.

Some of the above issues relate more to the governance framework, which will be developed in the next report, D2.3.d2. We hope the arguments and evidence presented so far make the other challenges briefly outlined here appear worthy of further study, in the remainder of the project.

## 6 CONCLUSION

This report has discussed a wide range of concepts and ideas related to the provision of ‘big open legal data’. Starting from an acknowledgement of Susskind’s seminal work, we have shown how the OpenLaws project needs to go farther in its adoption of a socio-economic perspective, beyond the capitalist economy and neoliberal business models, in order to facilitate and support four pillars of the sustainability of BOLD:

- 1- Community-based (crowdsourced) and Commons-based peer production in the form of annotations of the laws and case histories held by the BOLD Databases. The value being held up here is “economic” in the sense of economic anthropology’s understanding of Social Relationships as a domain of value. Therefore, this pillar relates to the social contribution to the economic sustainability of BOLD Databases. Similarly to the open source model, it is inclusive of citizen and private company contributions and caters to their different motivations and utilities. Reflections on different issues related to Commons-based governance models, within and outside the legal domain, have been proposed and will be further analysed in the next report on OpenLaws governance, D2.3.d2
- 2- Strengthening of democratic values such as transparency, accountability, and democratic participation on the part of *all* the public sector stakeholders, through the community-based engagement model of Pillar 1. The value being held up by this second pillar is fundamentally “Democratic” and must not be distracted or diluted by private sector profit motives; hence the need for a non-capitalist and non-exchangeable currency. The importance of this pillar will also be further discussed in our next report on OpenLaws governance.
- 3- (In Scenario 2) Strengthening the authority and legitimacy of the PA by giving it the power to create (non-capitalist) money to motivate and incentivize the citizen contributors further. The structural impossibility to speculate with LCs ensures that a healthy separation can be maintained between the motives of the public and private sectors, while enabling them to cooperate constructively. This pillar appears to facilitate greater mutual trust between the State and Citizens.
- 4- Strengthening the legal sector economy as a whole, and the service sector economy it interacts with, especially with respect to the vulnerability of the smaller companies to the credit fluctuations caused by the global financial markets and the routine cashflow fluctuations whose deleterious effects are merely a consequence of their smaller scale. In addition, this pillar also points to a greater economic empowerment of individuals through greater (service) purchasing power.

The main result of this work is that the socio-economic framework we propose, although radically innovative at the most fundamental economic level possible, i.e. at the level of the ontology of money, is compatible with the capitalist economy and neoliberal business models. In this sense it should be seen as *complementary* to less radical approaches, such as OD as public good, or Scenario 1, that was also discussed in Chapter 5.

At the same time, the coexistence of such radically different monetary models cannot help but make the general public more aware of the fact that money does not have to be taken for granted. More specifically, that it is subject to *design* like any other (social) technology, and that different designs carry different consequences for the economy and society. This greater awareness of the interdependence of the social and economic dimensions of society goes hand-in-hand with the objective of OpenLaws to improve access to legal data in the interest of greater democratic participation and sustainability.



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